

# THE SCHOOL REVIEW

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## Educational News and Editorial Comment

### THE DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS OF THE NATIONAL EDUCATION ASSOCIATION

The annual meeting of the Department of Secondary-School Principals of the National Education Association was held in Cleveland, Ohio, February 25-28 in conjunction with the meeting of the Department of Superintendence. The program consisted of eight sessions, four of which were general and four special in character. The main theme of the general sessions was supervision, eight addresses dealing with that phase of secondary-school administration. The special sessions were devoted to the discussion of problems relating to the junior high school and the junior college. The junior high school sections dealt with such administrative problems as the daily program, the training of teachers, individual differences, and vocational training. The junior-college sections dealt with somewhat more general topics, such as the service of the junior college to the community, orientation courses, and the relation of the junior college to other units of the school system.

The discussions of supervision revealed wide divergences in view. Some of the speakers exhibited a disposition to reduce greatly the supervisory activities of principals. Such speakers emphasized the

competency of teachers and advocated independent creative teaching without direction from the principal. Other speakers pointed out the evils which issue from lack of unity of method throughout the school. There was general agreement in the condemnation of arbitrary dictatorial supervision. Careful supervision based on scientific study of methods and of results was defended as safer than relaxation of supervision.

Both the general sessions and the special sessions were well attended, the attendance being the largest in the history of the organization. The programs attracted many superintendents as well as high-school principals.

The printed proceedings of the meeting are available in Bulletin No. 25 of the Department of Secondary-School Principals. The bulletin reporting the annual meeting is one of a series of five bulletins published annually by the Department. Any member of the National Education Association who is a principal of a junior or senior high school or of a junior college or who gives courses on secondary education in a college or school of education may become a member of the Department and receive the bulletins by paying an annual membership fee of two dollars to the executive secretary.

The present membership of the Department of Secondary-School Principals is approximately 3,500. The ten states which have the largest number of members are: California, 523; Illinois, 487; Kansas, 186; Ohio, 151; Kentucky, 148; Michigan, 147; Maine, 139; Massachusetts, 130; Pennsylvania, 117; and New Jersey, 111.

The officers elected for the ensuing year are: President: Milo H. Stuart, principal of the Arsenal Technical High School, Indianapolis, Indiana. First vice-president: M. Channing Wagner, principal of the Wilmington High School, Wilmington, Delaware. Second vice-president: W. F. Warren, principal of the Durham High School, Durham, North Carolina. Executive secretary: H. V. Church, superintendent of the J. Sterling Morton High School and Junior College, Cicero, Illinois. Executive committee: J. Stevens Kadesch, headmaster of the Medford High School, Medford, Massachusetts; John W. Harbeson, dean of the Pasadena Junior College, Pasadena, California; and Arthur M. Seybold, principal of the Thomas Jefferson Junior High School, Cleveland, Ohio.

## IMPROVING COLLEGE TEACHING

The criticism of colleges which is often indulged in by public-school officers not uncommonly takes the form of assertions that the colleges are not interested in good teaching and that they are dominated by tradition and are consequently far behind other educational institutions. Anyone who is disposed to accept such criticisms of the colleges will do well to read Yearbook Number XVII of the National Society of College Teachers of Education, entitled *Current Educational Readjustments in Higher Institutions*. This yearbook is published by the University of Chicago Press.

The spirit and the general character of the yearbook are clearly indicated by the following paragraphs from chapter i.

The chief purpose of this yearbook is to describe current efforts to improve instruction in higher institutions and to summarize the results of published studies relating to instruction in academic and professional schools. A report of this type is timely for several reasons. First, the interest of colleges, universities, and professional schools in improving instruction has increased with surprising rapidity during recent years and is now keener than at any previous time. Furthermore, several hundred scientific studies of the problems of instruction in higher institutions have been published during recent years, many of which are relatively inaccessible. Again, a large amount of experimental work is now in progress in various institutions, about which little is known by those making similar studies. It was the judgment of the members of the National Society of College Teachers of Education at their meeting in 1928 that, if these published and unpublished studies could be presented in organized form, they not only would reveal "the leaven working in college teaching" but would encourage and direct college teachers in their efforts at further improvement.

It is not proposed here to consider in detail the causes of current educational readjustments and of keen interest in improving instruction. It will be appropriate, however, to note in passing that they may be attributed to many different forces and conditions. Perhaps the most immediate causes of current educational readjustments are the financial limitations which many higher institutions have experienced and the pointed criticisms which have been made during recent years of both academic and professional training. Of far greater significance, however, are certain fundamental social changes, of which the following are examples: the rapid increase in population and its concentration in limited areas; the changing industrial order accompanied by increased wealth and economic freedom; the whole-hearted recognition by commercial and industrial organizations of the value of college-trained men and women for expert service in particular fields; the insistent demand that higher institutions provide adequately for rapidly increasing numbers of young men and women who differ

widely in capacity, previous training, and experience; the broader academic and professional training required by adults who engage in various professions. Such conditions, which are the natural result of social evolution, have made it necessary for higher institutions to scrutinize their practices critically and not infrequently to modify them radically.

Of equal importance in stimulating educational reforms are various forces and conditions within institutions, such as the rapid increase in human knowledge, resulting in the automatic enlargement of curricular materials and creating a need for the reorganization of the subjects or fields taught; the development of difficulties in connection with the elective system, resulting in radical changes in required courses and sequences; a better understanding of individual differences and needs and of the processes involved in learning, justifying many changes both in the curriculums provided and in the techniques of teaching employed; the spirit of competition which has prevailed for decades among institutions and among departments of a given institution, stimulating constant effort to provide improved and attractive courses; the attitude of inquiry toward teaching problems which has developed rapidly of late in many institutions, resulting in open-mindedness and in willingness to recognize and consider needed changes; and the development of techniques of investigation which make possible many needed experiments and scientific studies of various types.

#### PARENTS' EXPOSITION IN NEW YORK CITY

The schools of New York City recently organized and presented to the public of that city an elaborate educational exposition. There were booths where educational activities were carried on, gymnasium exhibits, demonstration recitations, and auditorium exercises. A letter addressed to the teachers and administrative officers in the city school system by the chairman of the exposition committee includes the following statement of the purpose of the exposition.

For several months we have been organizing an exhibition of school work to be presented to the parents and taxpayers of this city during the last week of February.

We are placing before the people a cross-section of the school system in order that they may be better informed regarding the opportunities in education which exist for their children and that they may gain a more complete understanding of the momentous problems involved.

While we are in the midst of this extra effort to increase interest in education, it is well that we should again view the picture of what free public education means in a city of six million inhabitants.

In our day schools we have, in round numbers, 1,243,200 children distributed as follows: elementary day schools, 790,000; junior high schools, 86,000; high schools, 150,000; vocational and trade schools, 5,000; continuation schools, 75,000; training schools for teachers, 5,000; truant schools, 400; adult classes in



citizenship, 6,000; children with heart trouble, 1,000; anemic and undernourished children, 4,000; tubercular children, 700; ungraded classes, 8,000; home-bound children for whom visiting teachers are provided, 9,000; and, at the time of this report, 26 children in hospitals receiving instruction.

In the afternoon well over half a million children are provided with healthful recreation in official and unofficial community centers and after-school playgrounds.

In the evening 35,000 adults are given instruction in English and citizenship; 32,000 are in regular attendance at evening high schools; and 6,000 young men and women are engaged in perfecting themselves in knowledge and skill relating to all important trades and occupations.

The task of organizing an exhibition of this kind is great, but, through the whole-hearted co-operation which exists and is ever ready when the call is sounded, I assure you that I am looking forward to the largest and most successful exposition that has been attempted by the Board of Education.

#### SOUTHERN HIGH SCHOOLS

The Bureau of Education has issued as Bulletin No. 16 for 1928 a full report of the statistics collected in 1926 by the Commission on Secondary Schools of the Association of Colleges and Secondary Schools of the Southern States. This bulletin, entitled *Secondary Schools of the Southern Association* and prepared by Joseph Roemer, secretary of the Commission, contains interesting facts regarding the 844 schools accredited by the Association.

Some of the items of general interest in the summary section of the bulletin are as follows:

*Length of term.*—There are sixty-one schools that run less than 175 days and sixty-five schools that run over 180 days. The minimum number of days a school may run to meet the nine months' term requirement is 175 days, during which time the school must be in session.

Practically one-half of the schools, 43.6 per cent of them, have a seven-period school day; about one-fourth run fewer than seven periods and about one-fourth more than seven periods.

*Length of class period.*—Considerably over one-half of all the schools, 57.8 per cent of them, have a class period from 41 to 45 minutes in length; 7.5 per cent have a period from 46 to 50 minutes in length; 2.0 per cent, from 51 to 55 minutes in length; 16.6 per cent, from 56 to 60 minutes in length; while 0.4 per cent have periods over one hour in length, and 15.6 per cent have periods only 40 minutes in length.

*Number of units required for graduation.*—Practically seven-eighths, 86.9 per cent, of all the schools require sixteen units for graduation; 10.5 per cent require more than sixteen units; and 2.6 per cent require less than sixteen units.

*Grades in high school.*—The most common grade combination of the Southern Association secondary school is 8, 9, 10, 11. There are 48.6 per cent of all the schools on this basis of organization. The next most common type is composed of Grades 9, 10, 11, 12; 31.6 per cent of the schools are on this basis of organization. Several other types of organizations are found, chief of which are Grades 10, 11, 12 and Grades 7 to 12. Consequently, the four-year secondary school is still the typical secondary school of the Southern Association. The junior high school organization has as yet made but small progress.

*Pupil enrolment.*—There are 283,127 pupils enrolled in the accredited secondary schools of the Association, 47.1 per cent of whom are boys, and 52.9 per cent are girls. Of the 21,483 graduates who entered college, 9,872 were boys, and 11,611 were girls. However, of the total number of boys who graduated from high school, 51.2 per cent entered college; of the total number of girls who graduated, 45.9 per cent entered college, evidencing the fact that a larger percentage of boys than girls go to college. The percentage of high-school graduates entering college ranges from 39.1 per cent in Louisiana to 67.9 per cent in South Carolina. The average for the Association is 48.2 per cent. In the North Central Association the range is from 23 per cent in Montana to 49 per cent in Arkansas and Oklahoma, with an average of 37.9 per cent for the entire Association.

*Pupil load.*—There are 15.8 per cent of the pupils carrying five or more studies. Of these students, 17.7 per cent rank lower than the upper 25 per cent of their class. Only 2.6 per cent of all students carrying over four units failed in one of their courses the preceding semester.

*Program of studies.*—There are 83.9 per cent of all the pupils taking English, 71.9 per cent taking mathematics, and 64.0 per cent taking the social studies. These three constitute the most popular groups in the program of studies, if measured by the number of students registered in them. The natural sciences follow, with 40.5 per cent, and commercial studies and Latin are next, with 27.2 per cent for each.

*Curriculum tendencies.*—The five most common subjects added to the curriculum in the past five years are commercial course, home economics, biology, manual training, and general science; while the five most common subjects dropped from the curriculum in the past five years are English history, botany, physical geography, physiology, and zoölogy.

There were 1,429 postgraduate students attending these secondary schools for the year 1926-27; that is an average of 1.7 pupils per school. Only 23.1 per cent of the principals encourage graduates to return for more work in their schools. The students who return for postgraduate work can be divided into two general groups—those taking specific vocational training and those wanting to carry farther their general education. The principals who encourage students to return for postgraduate work offer as an inducement vocational studies, such as commercial work, manual training, agriculture, music, and art; or academic subjects, such as advanced mathematics, English, foreign languages, and the natural sciences.

*Junior college.*—There are forty-seven junior colleges connected with the public secondary schools of the Southern Association. Seventy-nine other public-school systems have in mind the establishing of a junior college in the next few years. This would indicate that the junior-college movement is becoming a rather important factor in the development of southern education.

*Library.*—The library situation can be stated as follows: 87.2 per cent of the libraries are in separate rooms; 73.5 per cent are card indexed; 23.8 per cent employ a full-time librarian; 55.8 per cent employ a part-time librarian; 95.3 per cent have five hundred volumes or more; 85.0 per cent get some kind of annual appropriation for their maintenance; and 87.4 per cent subscribe for at least one magazine.

#### THE WISCONSIN GUIDANCE PROGRAM

The following statement was issued by the University of Wisconsin.

Psychological tests of seventeen thousand high-school Seniors in Wisconsin probably will be made this spring as an additional part of the state-wide program of counseling and vocational guidance begun last year through the co-operation of Wisconsin school men.

Practically all heads of state and private colleges recently assented to the plan. Among Wisconsin organizations co-operating in the project are the Association of Presidents of State Teachers Colleges, the Association of Presidents of Private Colleges, and the high-school principals' association.

President Glenn Frank, of the University of Wisconsin, indorses the movement. Frank O. Holt, executive director of the state university's Bureau of Guidance and Records, recently presented the proposal as chairman of the committee on co-operation between institutions of higher learning and secondary schools of the state.

County training schools also have requested that they be allowed to participate in the project. . . . John Callahan, state superintendent of schools, is in touch with the proposal and has given it cordial indorsement.

The tests will be a further incentive for school men to study individual students in the high schools and colleges and to serve students more fully through effective counseling, comments Mr. Holt. The project is expected to encourage high-school students who are adapted to college work and to provide additional information to school men of the state as a basis for educational and vocational guidance.

All schools will use the same test. The tests will substitute for those given at the University of Wisconsin during the orientation period for Freshmen in the fall. New students enrolling at the state university from other states will be required to take the same test.

Favorable comment has been reported from all the colleges in the state which used the new admission blank last fall. A few minor changes will be made in the questions contained in the blanks, say officials. All institutions of higher

learning in Wisconsin will use the blanks this fall and will use the information derived from them for personal and guidance projects.

Valuable data are expected to be gained from the results of the psychological tests and the admission blanks. A follow-up study is expected to be made of high-school students who took the tests whether or not they enrol in a college.

#### RATING OF SOCIAL QUALITIES

The Bureau of Education has issued the following statement.

Students in the Flathead County (Montana) High School are graded on moral and civic qualities. Each student is graded by all his teachers in sportsmanship, school spirit, honesty and trustworthiness, open-mindedness, consideration for the rights and opinions of others, co-operation, initiative, leadership, industry, application, courtesy, manners, and mental and moral cleanliness. The records are permanently filed.

#### REQUIREMENTS FOR GRADUATION IN AMERICAN HIGH SCHOOLS

Bulletin No. 21, 1928, of the Bureau of Education, prepared by Carl A. Jessen, specialist in secondary education, and entitled *Requirements for High-School Graduation*, contains a very useful summary of the legal requirements for high-school graduation prescribed in state laws and regulations and additional requirements prescribed in regulations adopted by city school systems and by particular schools.

The impressive fact which is revealed by this bulletin is that high schools in different localities differ greatly in their conceptions of what constitutes a secondary education. The summary of state requirements is as follows:

*Total amount of credit.*—The total amount of credit required for graduation ranges from twenty-nine to thirty-six semester credits. Thirty-two semester credits (sixteen units) is the median requirement, being uniform in thirty-five states; thirty semester credits is the standard in ten states.

*English.*—English is the most universal constant, being specified in forty-one states; twenty-two of these require three years of the subject; nineteen, four years.

*Social science.*—Social studies follow English closely, with a total of forty states requiring some credit in history or other social science before a pupil may be graduated. Thirty-four demand that some training in American history be included, while twenty-two specify that study of civics must be pursued either separately or as a part of the American history course. In the total amount of compulsory social-studies credit, the frequency curve is bimodal, seventeen states requiring four semester credits and thirteen placing the minimum at two credits.

*Laboratory science.*—A year's work in elementary science is required in five states; three others give the pupil an option between general science and biology or physiology; in one state two semester credits of natural science are stipulated. A choice between chemistry and physics is given in two states, while thirteen accept a year's work in any science as satisfactory to the requirements. Twenty-six states place a science requirement as a condition of graduation.

*Mathematics.*—Fourteen states require a year's study of algebra, and nine of these add a year of geometry. Nine are content with any type of high-school mathematics course pursued for one year; one stipulates two years of some type of mathematics. Exactly one-half of the states include mathematics as a constant in the high-school course.

*Miscellaneous subjects.*—Physical education, varying in amount and in credit assignment, is required in seventeen of the states. A year's work in home economics is a constant for girls in two states. Two years of foreign language is a universal requirement in two states, and in one other it applies to all pupils except those who have elected a vocational course.

*Subject groupings.*—There is a very evident tendency on the part of state authorities to make it impossible for a pupil to be graduated from high school unless he can show evidence of fairly intensive work in two or more departments of study. In a number of states this policy is made effective through incorporating into the requirements of constants a major in English and various additional major or minor sequences. Nineteen states make mention of majors and minors, and fifteen of the nineteen make it compulsory that pupils present a certain number of major and minor groupings for graduation. One state requires that schools adopt curriculums with specific groupings of subjects; seven states recommend the organization of such curriculums.

The requirements of city systems and of individual schools are even more varied than are the state requirements. These facts call attention to the curriculum as distinguished from the courses which make up the curriculum. There are many teachers and school administrators who conceive of the present-day movement for curriculum reconstruction as concerned solely with the contents of the courses in English, Latin, and the other subjects. The extreme departmentalization of the high-school faculty tends to obscure the fact that requirements imposed in the early years are in reality conditions of admission to all advanced work and that the interrelations of courses extend far beyond the bounds of single subjects. Until there is much clearer understanding of all these interrelations, the separate units which should be included in high-school curriculums will be in doubt, and practice in the administration of gradua-

tion requirements will show the variations and diversity of views with regard to the true character of secondary education which the bulletin of the Bureau of Education reveals.

THE SIX-YEAR HIGH SCHOOL AND JUNIOR COLLEGE  
OF GRAND JUNCTION, COLORADO

Richard E. Tope, superintendent of schools at Grand Junction, Colorado, has supplied the following description of the high school and junior college in the school system under his administration.

The Grand Junction school system was organized on the 6-6 plan in 1917. Since 1925 the city has had a junior college in addition to the high school. The city has a population of 12,000 and a school census of 3,345.

The high-school plant accommodates all the pupils in the seventh, eighth, ninth, tenth, eleventh, and twelfth grades, a total of 1,170 pupils. A modern school plant adequate for all purposes has been built to take care of these pupils. It is provided with shops, domestic-science rooms, gymnasium, music room, auditorium, museum, library, administrative office, cafeteria, etc. All the equipment and the instruction which it makes possible are equally available to all pupils. As a result of multiple use, there is no idle time for any part of the school equipment. The entire plant is heated by one heating plant. The administration is very simple, economical, and consistent.

The experience of the school system with the six-year type of organization has been altogether satisfactory. All the pupils are a part of an organization that has no goal except the end. The material equipment of the school can be used with much greater economy under this plan. Indeed, such a six-year high school has no special weaknesses. Any tendency to develop weakness can be just as adequately dealt with under this organization as it could be under the conventional plan or under any other type of organization. No question has arisen with regard to the relative efficiency of this type of school even in the social development of all the pupils in the organization. There is opportunity for general development and growth toward leadership. All courses are easily articulated. All extra-curriculum activities are easily financed. There is no duplication of effort. There is one band organization, one orchestra, one school newspaper, one athletic organization, and so on through all the extras of a modern school organization.

There is an academic curriculum. This is presented to the pupils as the most important of all. In this curriculum only subjects required for college entrance are listed, and sixteen credits earned in these subjects are required for graduation. There is a Smith-Hughes agricultural curriculum the content of which is specified by government regulations. There is a commercial curriculum, for which the school has worked out a unique plan. In Grand Junction there is a high-class business college with modern equipment. This business college main-



tains high standards for commercial pupils. The public-school system has a contract with this college to teach pupils who want to take vocational courses in business. The high school can give commercial courses more economically by this method than it could by organizing a commercial department in the school. Finally, there is a general curriculum or "special course." To receive a diploma in this curriculum, the pupil completes sixteen credits in any kind of work offered in the school. This curriculum includes music, physical training, public speaking, drawing, extra-curriculum work, and a number of easy courses which are well within the capacity of dull pupils who cannot take standard subjects required for college entrance. This curriculum encourages dull pupils to stay in school for what they can get out of it.

In addition to the customary public-school work, the school provides vocational courses. Through a co-operative agreement with the Denver and Rio Grande Western Railroad and the State Board of Vocational Education there is maintained an opportunity school for railroad apprentices, shopmen, helpers, hostlers, firemen, etc. This is a trades and industry school under the provisions of the Smith-Hughes Law, a vocational school for adults. About 150 students are enrolled. This school aims to take the instruction to the people who need it, and a schoolroom has been arranged by the railroad company adjacent to the shops. A capable teacher is always present to give technical instruction to the men who need it and want it. In the railroad system the promotion of the men depends in large measure on the progress they make in their studies in this school.

Finally, the city has a junior college supported and controlled by the local school district. The junior college is in a separate building far removed from the high school. The junior college is directed by a dean under the superintendent of schools, and it has its own faculty.

The junior college has been in operation for four years. It offers courses in English, literature, mathematics, history, economics, French, chemistry, and psychology. Each course follows the same outlines and uses the same textbooks that are used in the University of Colorado. No attempt has been made to extend this work beyond academic lines, and the students are expected to go to regular colleges and universities to complete their work. The junior college is fully accredited by a number of institutions. Of more than one hundred students who have gone to higher institutions, not one has failed in his work. This year ninety-eight students are enrolled. The experience of the officers of the school system during the past four years has led them to believe strongly in this addition to the public-school system.

#### ADMINISTRATION OF THE FUNDS OF SCHOOL ORGANIZATIONS

J. J. Marshall, principal of the Sheridan High School, Sheridan, Wyoming, describes as follows the plan adopted in his school for the administration of the funds of school organizations:

Among the most vexing problems of the high-school principal is that of properly caring for the finances of the various school organizations in order that the funds may never be dissipated and just bills may never remain unpaid.

A number of years ago we adopted a plan as follows: The principal of the high school and the superintendent of schools agreed upon a faculty member who should act as a trustee of all pupil-activity funds. He is released from some teaching, as much as is necessary to keep him from being overburdened with the work. His bond is fixed at an amount high enough to cover the amount of money that will probably be in his possession at any one time, and the expense of this bond is paid by the Student Commission, which is the executive committee for the Student Body, our all high-school organization. We had printed at the expense of all the school organizations receipt books with fixed second sheets serially numbered. The trustee gives a receipt for each deposit given him and indicates on the receipt the name of the organization which is to be credited with the money as well as the name of the person from whom the money is received. Order books arranged in a similar manner were also printed. The sponsor of each organization is given an order book, and the trustee is directed not to pay any bill except on the written order of one of the sponsors.

One of the local banks approved by the superintendent, the principal, and the high-school faculty was chosen as the depository. This bank furnishes gratis checks especially printed for the Sheridan High School, serially numbered. Below the signature line are the words: "Trustee High School Activities Fund." On the return of the canceled checks the orders are fastened to the checks, and the checks are filed in numerical order. At the close of the school year a committee of three faculty members audits the books. In their auditing they check the receipt books, order books, and canceled checks. This task requires a full day.

The trustee keeps his books in much the same manner that a banker keeps his accounts with various depositors. Naturally, it is possible for an organization to overdraw its account, but it is unnecessary to secure a loan from the bank because the general surplus covers the overdraft. During certain athletic seasons when the expenses exceed the receipts, it is sometimes necessary to overdraw the athletic account. Arrangements are made later to make up the overdraft. No account is allowed to remain overdrawn for any considerable length of time.

There are more than thirty organizations which have funds. The faculty sponsor of each organization checks the receipts of that organization and sees that they are deposited with the trustee.

The trustee is the bookkeeping teacher in the high school, and he does the work so easily that it has never been any considerable burden to him. We have never lost any of our funds through improper handling, and no bill has ever been allowed to remain unpaid. Every bill is paid promptly even though it means a temporary overdraft on the funds of a given organization. We feel that we are teaching the young people in the Sheridan High School excellent business methods by this system.

## WASTE IN HIGH-SCHOOL EDUCATION

In a recent editorial the *New York Sun* commented as follows on a report made by the committee on vocational schools of the High School Teachers Association of New York City:

A committee of secondary-school teachers, after a survey admittedly incomplete, reports "the presence in our high-school population of a large element who are unable to profit by the usual type of high-school training." The investigation covered twelve high schools of the thirty-five maintained by the Board of Education, and in these the committee found, among the classes which entered in January, 1928, nearly two thousand pupils who lacked the minimum mental equipment necessary for success in academic studies.

How large a percentage these two thousand constituted of all the pupils who entered the twelve schools in question, the committee does not say. Evidently it lacked the means to conduct a more complete check-up, for it recommends that a comprehensive and accurate inquiry be made at once by someone with authority to collect data in every school of the city. It is a recommendation well worth carrying out, for the preliminary report just made implies that there is far more wasted effort in the high schools than is generally believed.

It would be a conservative estimate that the two thousand pupils referred to by the committee constituted 20 per cent of the total in their respective classes. If, therefore, the findings of the investigators are approximately correct, one pupil in every five is inherently unfit to follow the traditional academic course. For them high-school life has become, in the words of the committee, "a record of repeated failure," involving "an inexcusable waste of city money, pedagogical skill, and youthful energy and ambition."

The money waste under conditions such as are described by the teacher investigators must be vast, it is true. Yet that is a small factor in the situation. The waste of "youthful energy and ambition" is the greatest loss. A young man who at the age of eighteen discovers that he has spent four years traveling along the wrong road has lost something which he cannot regain. If he is permitted to enter college—as often happens—and awakens several years later to a realization of the hopelessness of his efforts, his failure is that much worse.

Educators are well aware that for some pupils it is hopeless to continue academic education beyond a certain point. Rarely, however, is a parent frankly told that it would be better for his son or daughter to enter a trade school than to follow a cultural course. Teachers, perhaps, fear that, if they do so, they may be suspected of undemocratic tendencies, but it is a fact that no less a democrat than Thomas Jefferson repeatedly advised that public academies above the elementary grade be restricted to those who could best profit by the instruction.

## THE HENRY C. FRICK EDUCATIONAL COMMISSION

The city of Pittsburgh, Pennsylvania, has a unique educational foundation established through the generosity of Henry C. Frick. This foundation, known as the Henry C. Frick Educational Commission, with headquarters at 469 Union Trust Building, Pittsburgh, has recently issued Number 2 of Volume 1 of the School Betterment Studies under the title *Youth and the Good*. The Foreword of this publication is as follows:

Mr. Henry Clay Frick provided a sum of money for the improvement of the Pittsburgh public schools.

This was the first instance in which a well-disposed citizen co-operated in a large way with the people of a community by making it possible to add to the facilities for public education certain things which could not be fairly provided by general taxation or from any of the regular sources at hand.

The Henry C. Frick Educational Commission was organized to administer the fund provided by Mr. Frick.

The first activity of the Commission has been to send, from year to year, selected teachers from the Pittsburgh public schools to attend summer schools in the various educational institutions, bringing back from all portions of the country contributions for the benefit of the children of Pittsburgh.

There has been thus secured a multiple benefit. The contribution made in cash through Mr. Frick's generosity and far-sighted wisdom and used toward defraying the expenses of the summer courses was multiplied first by the previous preparation of the teachers and by their added experience and knowledge thus acquired. The benefit was further multiplied by the co-operative contribution thus made by all the leading educational institutions to the improvement of the Pittsburgh public schools and through them to the schools of America and of the world.

Up to the present time over 3,200 teachers have been given scholarships by the Henry C. Frick Educational Commission at a total cost of over \$438,000. So successful has the experiment been in every way that experts have said they know of no instance in which the same amount of money has accomplished a like amount of good.

The second of the larger activities of the Commission was to introduce direct to the high-school pupils of Pittsburgh, at fifty of their regular assembly periods, a group of artists of outstanding personality and ability.

The results of this experiment were reported in School Betterment Studies, Vol. 1, No. 1, *Youth and the Beautiful*, copies of which may be secured by application to the Commission.

The Commission commends this field as a most fruitful method by which any well-disposed person of means may do a maximum amount of good by in-

creasing the effectiveness of America's most successful public-welfare institution—the schools.

The third of the larger activities of the Henry C. Frick Educational Commission has been to introduce to the high-school pupils of Pittsburgh a group of humanitarians of outstanding personality and ability, asking each to present that phase of service of which his life is an exponent and to have the results carefully noted, analyzed, and interpreted.

#### THE REFORM OF THE CALENDAR

A resolution favorable to the reform of the calendar was presented to Congress at its last session. The Pan-American Conference at Havana in 1928 recommended that the countries which are members of the Pan-American Union each appoint a national committee and prepare for an international conference to determine the best method of calendar reform. The Committee of Inquiry of the League of Nations is also actively investigating the matter.

High-school pupils should be interested in the proposal for reform both because of the historical significance of the reform and because of the promise which it offers for a great improvement in the organization of social and business affairs.

The present calendar is a compromise between the succession of seasons and the periodic phases of the moon. Furthermore, the calendar includes an arbitrary seven-day week, which had its origin in the religious practices and beliefs of the Babylonians.

It is proposed to reconstruct the calendar by dividing the year into thirteen months of exactly four weeks each. Each month would begin on Sunday and end on Saturday. The additional day necessary to make the 365 days of the common year and the two additional days of leap year would be holidays at the end of the thirteenth month.

Anyone who is interested in this general topic can secure further information by writing to George Eastman, chairman of the National Committee on Calendar Simplification for the United States, 343 State Street, Rochester, New York.

## A UNITARY COURSE IN UNITED STATES HISTORY FOR THE JUNIOR HIGH SCHOOL. I

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During the past two years a course in United States history has been required of all sub-Freshmen in the University High School of the University of Chicago. Like all classes for sub-Freshmen and Freshmen, classes in United States history meet four days a week, the periods being fifty minutes in length. The purpose of this article is to explain the selection and organization of the subject matter in the course.

Selection of material for a course in the history of the United States is imperative for two reasons. In the first place, the field is so vast that no one could survey it all within the limits of a lifetime even were such a survey deemed desirable. In the second place, the different aspects and details of American history—indeed, of all fields of history—vary widely in educative value. The course-builder therefore has no option; he must select. The only matter left to his decision is the determination of the principle or principles that shall guide or control him in the choice of subject matter for the course.

In making their selections of material, the authors of history textbooks and the makers of courses in history have usually followed the encyclopedic principle. Almost invariably they have included dates, persons, and events in their textbooks or manuals because of the intrinsic value of such items as matters of information or knowledge, not because the details selected interpret tendencies or movements in the past. Textbooks or manuals thus compiled generally present a condensation or summarization of the entire record of a nation's past instead of treating, with carefully selected, illuminating details, the outstanding, significant aspects of the story.

If the encyclopedic principle of selection is applied to the Colonial period of American history, for example, the result is usually a highly summarized treatment of each of the thirteen original colonies and a



presentation of the political, economic, and social features of the time. In addition, the main events, places, dates, and persons associated with the English settlements in the New World are generally included. Naturally, such a summarization is in large measure unintelligible to boys and girls, for it presents them with a mass of undigested facts dealing with many diverse, complex lines of development. However valuable the encyclopedic principle may be when embodied in a reference work, it has little merit when used to determine the selection of subject matter for educative purposes.

A second principle which may serve as a guide in the selection and organization of historical material for use in the schools is commonly referred to as the unitary plan. Here the purpose is to select for study only such episodes, persons, and details as will serve to interpret or explain the significant aspects and movements of the past which constitute the units of the course. From this point of view, incidents are regarded as primarily illustrative in character, important not for themselves alone but rather as a means to an end, the end being the understanding of the unit. As a result, many of the details ordinarily included in a course planned along encyclopedic lines will be omitted from a course organized in accordance with the unitary principle, while certain items generally omitted in an encyclopedic course will be included. In short, when the unitary principle is followed, factual material will be selected solely for its interpretative or educative worth, not because of its value as factual information or knowledge.

Courses organized in accordance with the encyclopedic principle differ fundamentally, then, from courses planned in accordance with the unitary principle. In the first case subject matter is selected for its informational value and is presented usually as knowledge which is to be remembered. In the second case material is selected for its value in illuminating a historical movement, that is, as a means to comprehension. The first type of course has for its main end memorization or recall; the second has for its goal rationalization or understanding.

The fundamental difference between the two principles of organization is often unrealized or ignored. In many of the courses of study, textbooks, and manuals published in late years, the terms

"unit" and "unitary" occur again and again, but the material presented under such terminology frequently does not conform to the requirements of a true unitary organization. In a recently published manual, for example, the third unit, "The New Nation Established," consists of the following questions with references covering in chronological order the period from 1789 to 1825.

1. What part did Washington play in the establishment of the new nation?
2. What were the chief problems in establishing the government during Washington's administration?
3. Why did political parties develop in the new nation?
4. How did the acquisition of Louisiana Territory strengthen the new nation?
5. In what sense did the War of 1812 establish the prestige of the new government?
6. How did the War of 1812 influence the economic independence of the American people?
7. Show how the Monroe Doctrine strengthened the foreign influence of the United States.
8. What was the new conception of the national government brought out by Webster in his "Reply to Hayne"?
9. How was a new national consciousness indicated by democratic tendencies in politics and religion?
10. In what sense are Irving, Bryant, and Cooper called the first American writers?
11. How did John Marshall strengthen the national government?
12. What are the best well-known evidences of American art up to 1825?

Helpful as most of these questions are, the main purpose of the division, or "unit," seems to be to present a rather complete story of a definite period of the nation's history for learning or memorizing, if one may judge from the nineteen standards set before the teachers as ideals for attainment by the pupils. In the "unit" under consideration the manual states that the pupils are expected, among other things, to be able to give the chief events in the unit in narrative form, the names of the first six presidents, the location of all geographic features listed under map work, the political and economic results of the War of 1812, and the identification of a large number of dates and terms. Both the guidance outline as given in the questions listed and the objectives listed in the standards of attainment indicate that the subject matter included in the unit was

selected and is to be taught in accordance with the encyclopedic principle.

In contrast, a true unitary organization of historical material in a situation similar to the foregoing example would exclude as irrelevant all details except those that illuminate and explain the unit. To be specific, pupils undertaking the study of a unit entitled "The New Nation Established" would not be required to find the present value of the Louisiana Purchase territory, or to show how the original Monroe Doctrine has since been expanded, or to explain the effect of the invention of the cotton gin, or to compare the industrial revolution in America with that in England, or to describe colonial architecture, or to identify Gilbert Stuart, or to learn the date of the prohibition of the foreign slave trade—all of which are required in the instance cited but all of which are foreign to the theme suggested by the title of the unit.

It is important that misconceptions do not arise regarding the point under consideration. In the example which has just been discussed the difficulty does not lie in the *title* of the unit. The title, indeed, indicates a genuine unitary conception. The difficulty arises rather from the details selected for study and from the standards set forth as objectives; in many instances both are irrelevant or are unrelated to the unit and hence are contrary to the unitary principle.

Illustrations could be multiplied in which neither the titles nor the contents of so-called "units" are unitary in character. Such is the case in a recently published course of study in which one of the "units" is entitled "The English Colonies in America." The block of material proposed for study consists of the following series of topics: (1) "Why Europeans Wanted To Come to America," (2) "Ignorance of Conditions in America," (3) "The Settlement of Virginia," (4) "The Story of the Pilgrims and the Beginning of Massachusetts," (5) "Other New England Colonies," (6) "The Middle Colonies," (7) "Colonies South of Virginia," (8) "How People from Many Countries Became Americans," (9) "The Colonies and the Mother Country," (10) "Various Industries in the Colonies," (11) "How Different Governments Developed in the Colonies," and (12) "Life in the Colonies." In this instance the title of the unit, "The English Colonies in America," suggests a stage, or period, of the nation's

history which is to be *covered* rather than a movement which is to be *understood*. The topics, too, reveal an effort on the part of the course-maker to include all the colonies in all their aspects—political, economic, and social—instead of an attempt to incorporate only such details as will interpret a *single* significant and comprehensive movement or line of development.

Many of the prevailing misconceptions concerning the essentials in a unitary organization have probably arisen from a misunderstanding of the true meaning of the term "unit." As defined broadly, "a unit is a comprehensive and significant aspect of some field of knowledge that, when mastered, proves an adaptive step in the adjustment of the individual." In the words of Professor H. C. Morrison, the outstanding exponent of the unitary principle, "the critical difference between a true unit of learning and a mere chapter heading is the difference between a significant and comprehensive aspect of the environment, or of a science, which can be understood and a mere division of descriptive or expository subject matter which cannot be understood except in relation to other chapters which themselves stand in isolation."<sup>1</sup>

It is in accordance with the interpretation of the unitary principle as set forth in the preceding paragraphs that the junior high school course in United States history in the University High School of the University of Chicago has been planned. The units comprising the course consist of those movements which, it is believed, are the most significant in explaining how the United States came to be what it is today. The materials chosen for study in each unit comprise the events, persons, and episodes that, after several years of experimentation, have proved of the most value in enabling the pupils to understand the movement under consideration. The present organization of the course, which must still be regarded as tentative, is as follows. The subject content of each unit appears immediately below the title of the unit.

#### I. How We Became Americans

1. Why white people first came to America: commerce—Marco Polo, Columbus, Henry Hudson; religion—the Pilgrims; oppression—James Oglethorpe and Georgia.

<sup>1</sup> Henry C. Morrison, *The Practice of Teaching in the Secondary School*, p. 177. Chicago: University of Chicago Press, 1926.

2. The kinds of people who came: the settlers at Jamestown; the colonists of Massachusetts; the different nationalities in South Carolina, Delaware, Pennsylvania, New York; the chief nationality in the colonies.
3. Migrations from Europe since the American Revolution: incomers from northwestern Europe to 1880—Carl Schurz, Edward Bok; incomers from southeastern Europe since 1880—Mary Antin, Michael Pupin, Edward Steiner.
4. Our present population: the class; University High School; Hyde Park and Woodlawn; Chicago; Illinois; United States.

## II. Why We Have English Institutions

1. Early claims to North America: Indian; Spanish—Columbus, Pope's decree, Ponce de Leon; English—the Cabots, Raleigh; Dutch—Henry Hudson; French—Cartier, Champlain, Marquette, La Salle.
2. Early struggles for the control of the New World: destruction of the Spanish Armada; defeat of the Dutch; early conflicts between the French and the English.
3. The Old French and Indian War: Washington's expedition to Fort Duquesne; Braddock's campaign; William Pitt; Montcalm and Wolfe; fall of Quebec; treaty of Paris.
4. Why England won North America: superiority of population in the colonies; character of settlements; nature of industry; character of government.

## III. How America Became an Independent Nation

1. Growth of colonial independence: effect of the ocean and the frontier; development of self-government—House of Burgesses, Mayflower Compact, Connecticut.
2. The colonies in the old British empire: character of colonial governments in 1760; relations with the British government—King, Parliament; division of authority—powers of colonial governments, powers of central government, unsettled questions.
3. Attempt of Great Britain to reorganize the old empire: the apparent need of reorganization—effect of the Old French and Indian War; the new imperial plan—Navigation Laws (Writs of Assistance), taxation (Stamp Act), troops in America (quartering acts).
4. Resistance against the new imperial plan: protests—James Otis and a test case, Stamp Act Congress; violation of law—New York legislature, Boston Tea Party; revolt—Lexington and Concord, Bunker Hill; separation—Declaration of Independence.
5. The struggle for independence—a civil war: in the middle states—Burgoyne's campaign, Washington at Trenton, Howe's campaign; in the west—Clark's campaign; in the south—Cornwallis at Yorktown.

#### IV. How We Secured Our National Government

1. Early attempts at union: relation of the colonies to one another; New England Confederation; the Albany plan; committees of correspondence; Continental Congress; Articles of Confederation—drafting, defects.
2. The making of the Constitution: difficulties under the Articles of Confederation—revenue, commerce, amendments, order; steps leading to the Constitutional Convention—Mount Vernon Conference, Annapolis Convention; Constitutional Convention—chief members, ratification of the Constitution.
3. The establishment of the national government: election of Congress and the president; organization of Congress; inauguration of Washington; organization of the executive departments; the Judiciary Act.

#### V. How Our National Government Was Tested

1. Finance: financial problems of the new government—debt, current expenses, income; Hamilton's proposals—foreign debt, domestic debt, tariff.
2. Law and order: collection of federal taxes—tariff, whisky; attitude of the West on whisky tax; Whisky Rebellion—causes, chief incidents, action of national government, significance.
3. Neutrality: European war; proclamation of neutrality; Citizen Genêt; XYZ affair; avoidance of war with France.
4. Political parties: views of the people—finance, interpretation of the Constitution, European affairs; Federalists in power—Alien and Sedition Laws; Virginia and Kentucky Resolutions; election of 1800.
5. War: quasi-war with France; the Barbary pirates; war with England (1812)—causes, military events (invasion of Canada, Perry on Lake Erie, the Constitution and the *Guerrière*, blockade on the Atlantic coast, burning of Washington, Battle of New Orleans); internal opposition—Hartford Convention; results of the war.

#### VI. How Negro Slavery Was Destroyed

1. Early slavery in America: slavery in colonial Virginia; spread to the other colonies; freedom given negroes in the North; the cotton gin and its effect.
2. Contests over the growth of slavery: balance of power between the free and the slave states; Missouri Compromise; Compromise of 1850; struggle over Kansas; election of 1860.
3. The secession movement: causes which led the states to secede in 1860; story of secession—South Carolina, effect on other states, formation of Confederate States of America, Lincoln and Fort Sumter.
4. The Civil War: comparison of North and South; the work of the Navy; Bull Run; opening of the Mississippi; the siege of Vicksburg; Lee and the Battle of Gettysburg; Sherman's march to the sea; Grant and the fall of Richmond.



5. The end of slavery: divided attitude of Northerners on slavery; use made of slaves after the war started; Emancipation Proclamation; Thirteenth and Fourteenth amendments.

#### VII. How Americans Won the West

1. Pioneers in opening the West: James Robertson; Daniel Boone; George Rogers Clark; David Crockett; Andrew Jackson; Sam Houston; Kit Carson; John Fremont; Brigham Young; Buffalo Bill.
2. Frontier settlements and frontier life: examples—Jamestown, Albany, Louisville, Detroit, Topeka, Salt Lake City; general description of frontier life—home, school, church, work, recreation.
3. Men who aided in developing the West: Robert Fulton and the steamboat; De Witt Clinton and the Erie Canal; Cyrus McCormick and the reaper; James Marshall and the gold rush to California; James Hill and the Great Northern Railroad; Clarence King and the geological survey; John Wesley Powell and irrigation.
4. Results of westward expansion: American character; composite nationality; conservation movement; a national democracy; temporary decline in culture.

#### VIII. The Coming of Big Business

1. Industrial America in 1860: natural resources undiscovered; business controlled by individuals and small companies—oil companies of Pennsylvania, mower and reaper companies of New York; ownership of land the chief form of wealth—the Astor family of New York.
2. Change in character of business and industry: Cornelius Vanderbilt and the New York Central Railroad; John D. Rockefeller and the Standard Oil Company; Andrew Carnegie and the development of the steel industry.
3. Leaders in developing American business and industry: Gustavus Swift and the meat-packing industry; Cyrus McCormick and the International Harvester Company; Marshall Field and the department store; J. Pierpont Morgan and the organization of the United States Steel Corporation; Adolph Zukor and the motion-picture industry; Samuel Insull and public utilities; Henry Ford and the automobile; Andrew Mellon and the aluminum industry.
4. Results of business and industrial development: growth of cities; consolidation of fortunes; increase in wealth; improved conditions of life.

#### IX. How We Won the Ballot

1. Voting in Colonial days: stockholders in the company—Virginia (London Company), Massachusetts (Massachusetts Bay Company); religious beliefs; ownership of property.
2. The American Revolution and the extension of the right to vote: the discussions of the time; ideas in the Declaration of Independence; provisions in the early state constitutions.

3. Influence of the West: equality among the pioneers; need for settlers; character of the constitutions of western states; election of Andrew Jackson; effect of western democracy on the East.
  4. Extension of the right to vote by amendment of the national Constitution: early non-interference with voting by national government; the Civil War and the Fifteenth Amendment; granting the suffrage to women—the Nineteenth Amendment.
- X. How America Became a World-Power
1. America at the close of the Revolution: extent of territory; number of people; extent of commerce; lack of influence.
  2. Expansion from sea to sea: Thomas Jefferson and the Louisiana Purchase; John Quincy Adams and the acquisition of Florida; Sam Houston and the annexation of Texas; James Polk and the Mexican Cession; the Gadsden Purchase.
  3. Position of America in 1890: territorial; financial; industrial.
  4. Tendency toward world expansion: treaties with China and Siam; annexation of Atlantic and Pacific islands; relations with Samoa; the opening of Japan to commerce by Perry; annexation of Hawaii; the Alaskan purchase; Spanish-American War—Porto Rico, the Philippines.
  5. The World War: causes—commercial rivalry, territorial disputes; the submarine and America's entrance into the conflict; Pershing in France—Château-Thierry, the Argonne; peace; America's position since 1918.

To secure the most satisfactory results from a unitary course in history, or from any other course for that matter, adequate teaching equipment is essential. Every history classroom in the University High School of the University of Chicago contains a miniature library, which consists of basic books, supplementary materials, and reference books as well as laboratory equipment in the form of maps, charts, and illustrative aids.

The following basic textbooks in sets which provide one copy for each pupil in the class constitute the core of the material used in the junior high school course in United States history: Tryon and Lingley, *The American People and Nation* (Ginn & Co.); Gordy, *History of the United States* (Charles Scribner's Sons); West and West, *The Story of Our Country* (Allyn & Bacon); Burnham, *The Making of Our Country* (John C. Winston Co.); Bourne and Benton, *A History of the United States* (D. C. Heath & Co.); Elson, *United States: Its Past and Present* (American Book Co.); Robbins, *School History of the American People* (World Book Co.); and Haworth and Garner,

*Our Country's History* (Bobbs-Merrill Co.). Among the classroom supplementary books, approximating 150 titles, the following representative books have proved especially valuable: Tappan, *American Hero Stories* (Houghton Mifflin Co.); Miller, *The March of Democracy* (D. C. Heath & Co.); Church, *Illinois* (D. C. Heath & Co.); Smith, *A Student's History of Illinois* (Hall & McCreary Co.); Wildman, *Famous Leaders of Industry* (L. C. Page & Co.); Southworth, *Builders of Our Country* (D. Appleton & Co.); Faris, *Where Our History Was Made* (Silver, Burdett & Co.); Gerwig, *The Declaration of Independence for Young Americans* (George H. Doran Co.); Thwaites, *Father Marquette* (D. Appleton & Co.); and Gordy, *Leaders in Making America* (Charles Scribner's Sons).

The classroom library also contains magazine articles and stories which contribute to an understanding of the various units of the course. Typical of this kind of material are the following: Goldsmith, "Early Colonial Trades and Industries," *Woman's Home Companion*, LV (April, 1928), 36, 130; Fullerton, "Uncle Sam's Greatest Christmas Gift," *Liberty*, III (December 25, 1926), 13-15; Fitzpatrick, "President Washington and 'Patty,'" *St. Nicholas*, LII (March, 1925), 450-55; Reilly, "The Draft in 1863 and 1917," *Liberty*, IV (May 21, 1927), 33-39; Cassell, "Abraham Lincoln Loved Boys," *St. Nicholas*, LIV (February, 1927), 254-56; MacCulloch, "This Man Saw Lincoln Shot," *Good Housekeeping*, LXXXIV (February, 1927), 20-21, 112, 115-16, 121-22; Garland, "The Westward March of Settlement," *Dearborn Independent*, XXVII (July 9, 1927), 1-2, 25-26.

The laboratory equipment which has been found helpful consists of maps, diagrams, and graphs and original themes prepared by the pupils. The following maps of the Sanford-Gordy American History Series (A. J. Nystrom Co.) have been especially useful: (1) "Age of Discovery"—No. 4, (2) "Spanish and French Explorers"—No. 5, (3) "Early Colonies"—No. 7, (4) "Division of North America"—No. 8, (5) "The Revolution"—No. 9, (6) "The Movement Westward"—No. 10, (7) "Slavery in the United States"—No. 12, (8) "Internal Improvements"—No. 13, (9) "Approach of the Civil War"—No. 14, (10) "Expansion of the American Nation"—No. 15, (11) "Growth of the Great West"—No. 17, (12) "Population and

Industries"—No. 18, and (13) "The World War"—No. 19. Many of the diagrams and graphs which have proved illuminating have been published in *The World Almanac and Book of Facts*, *The Chicago Daily News Almanac and Year-Book* and in such periodicals as the *Literary Digest*, *World's Work*, the *Review of Reviews*, *Current History*, and the *Independent*.

The historical collections of the Field Museum have been utilized to advantage for instructional purposes. Specimens of ore and metal and even mounted animals have been contributed by the pupils and have helped to make the study of the past vivid and realistic. A large number of original themes have been written by the pupils each year, and those which are exceptionally well prepared and which contribute pointedly to a better understanding of the units selected for study have been used for assimilative purposes. In order to encourage the production of original pictures, cartoons, and diagrams, use has been made of Knowlton's *Making History Graphic* (Charles Scribner's Sons). The employment of extensive library material and suitable laboratory equipment has proved invaluable in promoting understanding and in making the work in history vital and interesting.

[To be concluded]

## THE SIX-YEAR HIGH SCHOOL IN CLEVELAND

FRANK P. WHITNEY

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Thirteen years ago the Board of Education of Cleveland directed that the congestion in certain elementary schools be relieved by transferring the seventh and eighth grades to neighboring high-school buildings. Thus originated the six-year high schools in Cleveland.

Eight high schools are now of this type. Of the five other high schools, two are three-year schools, and three are four-year schools. The system is characterized by great mobility. Transfer of pupils from one school to another is especially easy at the beginning of the tenth year.

The latest high school to be added to the system is the Collinwood High School. This is organized as a six-year school with an enrolment in excess of four thousand pupils. The teachers have been recruited from various sources, from both within and without the city, and naturally represent varied experience.

In an effort to realize just what such a school offers in the line of new educational opportunity, the teachers have been encouraged to maintain a critical attitude toward the school and its problems. Recently twenty-eight representative teachers in the school were asked to state somewhat fully what they conceive to be the advantages and the disadvantages of the six-year high school. A summary of their answers follows. It is in all probability a fair cross-section of the opinion of the entire faculty of 155 teachers. It is difficult to see just why some of the points should be made either for or against the six-year scheme as such. Several of the disadvantages listed are evidently due not so much to the fact that the school is a six-year school as to its size. Nevertheless, every essential point of view is included. The summary at least has the merit of indicating what teachers themselves think about this new type of secondary school.

## ADVANTAGES OF THE SIX-YEAR HIGH SCHOOL

1. It eliminates the gap or break in secondary education.
2. It keeps senior and junior grades in closer touch.
3. It lessens friction between the two groups.
4. It makes possible more effective guidance.
5. It provides both more equipment and more varied equipment.
6. It tends to hold the pupils longer in school.
7. It is more economical in administration and supervision.
8. It provides continuity of administration of both curricular and extra-curriculum programs in realizing the cardinal principles.
9. It offers a greater laboratory for educational experiment.
10. It provides for more varied exploratory courses.
11. It promotes continuity of courses and curriculums.
12. It promotes a preview of senior high school subjects.
13. It affords a better chance at transitional and vocational subjects.
14. It makes possible the election of senior high school subjects by over-age pupils and pupils who leave school early.
15. It provides for a more effective co-ordination of courses.
16. It promotes socialization.
17. It provides an atmosphere which promotes growth.
18. It provides more opportunity for fostering large-group consciousness.
19. It provides greater opportunity for student leadership.
20. It promotes citizenship through reactions of one group on another.
21. It facilitates development of higher examples of leadership, scholarship, and character.
22. It offers better training in consideration for others.
23. It incites the junior group to wholesome emulation.
24. It provides opportunities for "big-brother" and "big-sister" activities.
25. It offers the example and presence of older pupils, which, when properly directed, may be of great value to the younger group.
26. It provides more adequately for individual differences.
27. It facilitates grouping by age interests for some purposes.
28. It gives a fairer chance during the period of adjustment to the pupil who is weak scholastically, socially, or morally.
29. It promotes the orientation of pupils.
30. It emphasizes the continuity of the pupil's experience.
31. It creates better understanding among the teachers.
32. It broadens the teachers' minds and sympathies.
33. It makes possible better supervision of teaching.
34. It gives the teachers more and longer contact with the pupils.
35. It helps the teachers to see secondary education as a continuous process.



## DISADVANTAGES OF THE SIX-YEAR HIGH SCHOOL

1. It means loss of individual contact.
2. It enhances the danger of over-organization, excessive attention to machinery.
3. It complicates library and reading-room problems.
4. It requires an excessively high type of organization.
5. It exaggerates all the usual school problems.
6. It adds to the difficulty of administering school projects.
7. It intensifies evils inherent in either form of organization.
8. It develops friction between younger and older pupils because of lack of common interests.
9. It requires duplication of extra-curriculum activities.
10. It benefits the younger pupils at the expense of the older pupils.
11. It develops confusion in pupil interests.
12. It hinders the development of a general school spirit.
13. It offers unusual difficulties in schedule-making.
14. It is likely to develop into an unwieldy student body.
15. It tends to reduce the opportunity to specialize.
16. It does not develop the special atmosphere of the specialized high school.
17. It prevents the development of a special junior high school atmosphere.
18. It tends to allow the younger pupils to imitate the faults rather than the virtues of the older pupils.
19. It tends to premature development of the younger pupils.
20. It tends to give the younger pupils a wrong perspective.
21. It increases the problem of moral guidance.
22. It tends to suppress junior high school pupils and to give them an inferiority complex.
23. It promotes domination of the younger pupils by the older pupils.
24. It denies the younger pupils the chance of leadership.
25. It increases the difficulty of adjusting the schedules of the younger pupils.
26. It has a questionable psychological effect on the younger pupils, especially those in the seventh grade.
27. It offers less chance for initiative among the ninth-grade pupils.
28. It offers many bad examples to the younger pupils.
29. It fails to make the younger pupils feel at home.
30. It provides more problems and less help for the teachers.
31. It promotes jealousy among the teachers, especially when different salary schedules are in effect.
32. It tends to develop friction among the teachers operating under two standards as to class size.
33. It multiplies the details to be handled by the teachers, especially with respect to discipline outside the classrooms.

The six-year high school has often been regarded in Cleveland as a temporary expedient, a necessary evil due to housing conditions to be eliminated or outgrown as soon as possible, the pupils to be housed in separate three-year schools in different buildings. The hostility toward the addition of the seventh and eighth grades to an already existing four-year high school or at best the passive acceptance of this addition, the difficulty of adjusting curriculums and courses to the new situation, and the social difficulties due to the mingling under one roof of pupils of widely different ages have all contributed to perpetuate the impression that a six-year high school is an anomaly.

It is now pertinent to ask whether the six-year high school does not offer a unique opportunity, whether, in fact, it has ever been given a fair trial, whether the supposed disadvantages are not at least partly fictitious, and whether there are not compensations to be discovered in such an organization sufficient to outweigh the disadvantages of which much has been heard.

The six-year high school certainly offers a rare opportunity to effect continuity in curriculum-building and thus not merely to bridge but to eliminate entirely the traditional gap between the upper and lower schools. It affords real guidance a chance by keeping the pupils under one environment long enough to discover aptitudes and to direct tendencies. Given wise and sympathetic observation, unity and consistency of direction can surely be secured far more effectively under a single organization than under two.

It has been demonstrated in music, for example, that the best results depend on sufficient exposure. What is true of music is probably just as true of other subjects. It is a question to be answered by actual experiment whether desirable attitudes can be as successfully engendered by a school experience of three years in each of two schools as by an experience of six years in one school. The six-year school asks a chance to show what it can do toward creating social-civic attitudes, for example, in comparison with schools with less opportunity for continuous impression.

It must not be forgotten, also, that as things now stand the vast majority of the pupils who leave school withdraw near the end of the junior high school or the beginning of the senior high school. Neither

the junior high school nor the senior high school separately is in a position to meet in any adequate fashion the needs of those who leave school early. This is at present essentially a ninth- and tenth-year problem. It is a problem of combining junior high school academic levels and senior high school vocational levels. Only in a six-year high school is the situation adapted to the needs of this group.

The experience of foreign countries, especially England, France, and Germany, and the practice of many private secondary schools in this country lend color to the belief that we cannot afford to break up all our secondary education into small three-year units. There are sufficient grounds at least for urging that, in the interest of uniformity, we do not suppress entirely what may easily develop into a distinctive and invaluable type of education, the six-year secondary school.

Still another opportunity confronts the six-year high school. Cleveland is not committed to a stereotyped education in its public schools, nor to a stereotyped form of organization or of curriculum. In the Collinwood High School, a new school with exceptional facilities in space and equipment and with no hampering traditions, the experiment of carrying on side by side many types of curriculums under one roof is being given a fair chance. The range of courses, the size of the school, and the variety of interests served all thrust into the foreground the need for guidance. Without intelligent and continuing and effective guidance, expensive equipment and numerous courses may lead to nothing but confusion. Without the equipment and the variety of offerings, guidance is more or less ineffective. It is the aim of this school to create not a technical nor a commercial nor an academic atmosphere, congenial to some special vocation, but a work atmosphere, where honor is accorded genuine achievement of many kinds, where tolerance and respect for differing ideals are taught, and where mastery is the basis of distinction. Such a school has an unexampled opportunity for training in social-civic attitudes and in vocational adjustment.

## THE EFFECTIVENESS OF THE CONTRACT METHOD AS COMPARED WITH THE ORDINARY METHOD OF TEACHING

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Much has been written of late in favor of individualizing instruction to fit the capacity and interests of pupils. Carefully controlled experiments have been reported showing statistically the superiority of a group taught by some method of individualized instruction over an equated group taught by the traditional recitation method.<sup>1</sup> The available evidence is in favor of the former method on both theoretical and experimental grounds. The studies, however, do not show by how much the former method surpasses the latter method.

The purpose of the study here reported was to determine statistically the relative effectiveness of the contract plan and the ordinary plan of teaching secondary-school classes in three units of American history.

The term "ordinary plan" is self-explanatory. It is the textbook-recitation method, against which much criticism has been leveled. The "contract plan" used in this study is not the Dalton form of contract but rather a modification of the procedure advocated by Morrison<sup>2</sup> and Miller.<sup>3</sup> It is an attempt to retain the socializing

<sup>1</sup> a) George R. Moon, "An Experiment Made by a History Teacher," *School Review*, XXXV (March, 1927), 208-16.

b) James C. Conner, "An Experiment in Teaching American History by the Laboratory Procedure." Unpublished Master's thesis, University of Oklahoma, 1926.

c) N. M. Funk, "A Comparative Study of the Results Obtained by the Method of Mastery Technique and the Method of Daily Recitation and Assignment," *School Review*, XXXVI (May, 1928), 338-45.

<sup>2</sup> Henry C. Morrison, *The Practice of Teaching in the Secondary School*, especially chap. xvi. Chicago: University of Chicago Press, 1926.

<sup>3</sup> a) Harry Lloyd Miller, *Directing Study*, especially chap. ii. New York: Charles Scribner's Sons, 1922.

b) Harry Lloyd Miller and Richard T. Hargreaves, *The Self-directed School*, especially chap. ii. New York: Charles Scribner's Sons, 1925.

values of the traditional recitation and yet allow each pupil to progress at a rate suited to his capacity and interest. The three units of American history constitute a semester of work in the course required of all pupils in North Dakota in the eleventh or twelfth grade and cover the period from the settlement of America to about 1829.

Stated as briefly as possible, the method of procedure was as follows: The entire period was divided into three "jobs," called "Getting a Foothold, 1492-1763," "Revolution and the Establishment of the American Nation, 1763-89," and "Nationalism and Democracy, 1789-1829." A mimeographed guide sheet for each "job" was furnished each pupil. This sheet contained an introductory or orienting paragraph intended to establish a mental set for the job and in as few words as possible give him a bird's-eye view of the ground he was to cover. This guide sheet also contained an outline of the entire job and a detailed assignment of what must be done to complete each "contract" or part of the job. The chief purpose of these contracts, three in number, was to provide for individual rates of progress and to lead the pupil to assume responsibility for his learning in the case of units larger than daily assignments.

The arrangement of the contracts was such as to differentiate between the minimum assignment, or C contract, consisting of what may be termed the "minimum essentials," and the additional reference readings, problems, thought questions, special projects, drawings, written work, etc., comprising the more difficult medium and maximum assignments, called "B" and "A" contracts. Each contract included sufficient directions to make clear just what was wanted and to motivate the work. The contracts were constructed on an ascending scale of difficulty, qualitatively as well as quantitatively, each contract challenging a higher level of ability than the one preceding. Mastery of the C contract, evidenced by a mark of 90 on an objective test, yielded a school mark of 86, 70 being passing, and qualified the pupil to attempt the B contract. When the pupil satisfied the teacher that he had negotiated the challenges of the B contract, he was allowed to undertake the A contract. A definite time limit was set for each job.

Two hundred and seventy-five pupils in ten first-class high schools were used in the experiment. One hundred and thirty-seven

pupils constituted the control group, for which no change was made from the ordinary plan of procedure used by the teachers. These pupils were, however, given the same initial and final tests that were given to the pupils in the experimental group. The experimental group, consisting of 138 pupils, was taught by the contract method. The schools in the group not deviating from the ordinary procedure were those at Starbuck and Roseau, Minnesota, and Larimore, Lakota, and Langdon, North Dakota. In the contract group were the schools at East Grand Forks, Minnesota, and Bottineau, Hope, McClusky, and Rugby, North Dakota. These schools are not referred to by name in the tables that follow, a letter being assigned to each. All are of the same classification, which means approximate equality in buildings, graduation requirements, supervision, maps and equipment, library facilities, and pupil and teacher load. The intelligence tests given show a normal distribution of ability.

None of the teachers had had less than two years of teaching experience, and in six of the ten schools either the superintendent or the principal taught the course. All had specialized in history. No supervision of the teaching could be given by the experimenters other than through correspondence, through the guide sheets, and through mimeographed instructions concerning the contract method. None of the teachers had used the method before.

To pair the schools, the individuals in the paired schools, and all the individuals in the two groups irrespective of school was no easy task. Intelligence tests, the Gregory Tests in American History, Test III, Form A, and the Van Wagenen Reading Scale, History A, were used to ascertain, respectively, general ability, actual knowledge of history, and ability to read historical material.

Four different intelligence tests had been used by the schools, and it was not thought expedient to ask some of the schools to give another test. Therefore, it was necessary to reduce the scores on the Terman Group Test of Mental Ability, the Miller Mental Ability Test, the Otis Self-Administering Test of Mental Ability, and the Otis Group Intelligence Scale, Advanced Examination, to a common denominator. This was done by reference to an absolute scale previously compiled by one of the experimenters. It was thought that the I.Q.'s would not be a satisfactory measure in the case of such mature pupils as are found in the eleventh and twelfth grades.



Since it was desired to secure as many pairs of comparable pupils as possible, the schools were first matched on the basis of size, as shown in Table I. Schools A, C, E, G, and I and Group X used the contract method. The schools paired in a fairly satisfactory manner. In the case of the means of the intelligence scores converted into an absolute scale, the greatest variation is between Schools I and J, the difference being 9.2 points. In the case of the means of the scores on the initial history test, the greatest differ-

TABLE I  
NUMBER OF PUPILS IN EACH SCHOOL AND MEAN SCORES ON THE INITIAL TESTS

School	Number of Pupils	Mean Intelligence Score on Absolute Scale	Mean Score on Initial History Test	Mean Score on History-Comprehension Test	Mean Composite Score
A.....	19	42.35	34.92	84.98	133.86
B.....	18	40.21	31.37	85.91	127.76
C.....	23	42.41	29.45	85.04	128.10
D.....	26	37.42	29.69	84.26	122.52
E.....	37	37.22	30.83	79.61	121.14
F.....	46	36.68	25.40	80.12	114.64
G.....	15	39.17	22.30	82.90	115.20
H.....	13	40.21	30.50	80.57	124.16
I.....	22	31.58	24.77	80.14	109.36
J.....	21	40.78	24.36	82.18	119.43
Total:					
Group X.....	116	38.70	29.31	82.09	121.71
Group Y.....	124	38.65	27.96	82.42	120.58

ence is between Schools G and H—8.2 points. On the history-comprehension test the means in no case vary more than a fraction over two points. In the case of the composite means, the differences range from 5.58 points to 10.07 points. When the individuals are combined into two groups irrespective of schools, the means in no case differ more than 1.35 points. Naturally, the smaller the groups considered, the greater is the discrepancy.

In arriving at the composite scores in the case of the schools as well as in the case of individual pupils, it was necessary to weight the scores lest the uniformly higher scores on the history-comprehension test vitiate the value of the scores on the other two tests. It was found that, except for one score of 100, the highest score on

the history-comprehension test was 95. In the case of the absolute intelligence scale and the Gregory test the highest scores were 64. Therefore, the history-comprehension test was given a value of two-thirds, whereas the other two tests were each given a value of one. For example, if a pupil earned scores of 46 on the absolute intelligence scale, 35 on the Gregory test, and 81 on the history-comprehension test, his composite score would be  $46 + 35 + (\frac{2}{3} \times 81)$ , or 135.

Naturally, it was difficult to pair the individual pupils. The first basis for pairing was the score on the Gregory test, since this test was the most important, since it was used a second time in comparing the relative progress made, and since it was the basis on which final conclusions were drawn. In no case were pupils paired where there was a difference of more than a few points on the Gregory test. Where divergences occurred, the composite score was the deciding factor, care being taken to select pupils whose scores on the other tests were not too far apart.

Of the eighty-seven matched pairs when school was compared with school, only five pairs showed a difference of more than six points between the two scores on the Gregory test, and in no case did the composite scores vary more than two points. When the pupils in the major groups were matched, only two of the 103 pairs showed a difference of more than six points in scores on the Gregory test. Space prevents the presentation of more than the summary tables.

In addition to the pairing of the schools using the contract plan with those using the ordinary plan on the basis of size and achievement as shown by the initial tests and the pairing of individuals within the matched schools, another pairing was made, as has been said, of the individuals in the contract group with the individuals in the ordinary group. This pairing is shown in Table I under the heading "total group."

Of course, it was not possible to pair every pupil in every school. One might wish that pupils would obtain such scores as would lead to exact pairings, but human beings vary widely in their individual characteristics and achievement. There were 275 pupils studying American history in the schools co-operating. Of these, 35 did not take one or more of the tests on which the pairing was based, leaving 116 pupils in the contract group and 124 in the non-contract

group. The impossibility of pairing each pupil further reduced the number to 87 in each group when school was paired with school and to 103 when individuals were paired irrespective of schools.

TABLE II  
COMPARISON OF TOTAL-GROUP MEANS AND PAIRED-GROUP MEANS FOR  
SCHOOLS AND MAJOR GROUPS

	Number of Pupils	Mean Intelligence Score on Absolute Scale	Mean Score on Initial History Test	Mean Score on History-Comprehension Test	Mean Composite Score
School A:					
Total group . . . . .	19	42.4	34.9	85.0	133.9
Paired group . . . . .	13	39.5	31.4	83.8	126.0
School B:					
Total group . . . . .	18	40.2	31.4	85.9	127.8
Paired group . . . . .	13	41.1	29.6	86.4	127.8
School C:					
Total group . . . . .	23	42.4	29.5	85.0	128.1
Paired group . . . . .	20	39.7	27.5	83.9	123.9
School D:					
Total group . . . . .	26	37.4	29.7	84.3	122.5
Paired group . . . . .	20	37.4	29.6	84.4	122.4
School E:					
Total group . . . . .	37	37.2	30.8	79.6	121.1
Paired group . . . . .	28	35.4	27.7	79.2	116.4
School F:					
Total group . . . . .	46	36.7	25.4	80.1	114.6
Paired group . . . . .	28	36.0	26.8	81.0	116.0
School G:					
Total group . . . . .	15	39.2	22.3	82.9	115.2
Paired group . . . . .	12	42.2	25.8	84.7	122.5
School H:					
Total group . . . . .	13	40.2	30.5	80.6	124.2
Paired group . . . . .	12	40.3	30.0	79.7	122.5
School I:					
Total group . . . . .	22	31.6	24.8	80.1	100.4
Paired group . . . . .	14	37.1	26.4	82.4	118.3
School J:					
Total group . . . . .	21	40.8	24.4	82.2	119.4
Paired group . . . . .	14	38.0	24.7	83.6	120.4
Major Group X:					
Total group . . . . .	116	38.7	29.3	82.1	121.7
Paired group . . . . .	103	38.3	28.0	82.0	120.5
Major Group Y:					
Total group . . . . .	124	38.7	28.0	82.4	120.6
Paired group . . . . .	103	38.2	28.3	82.5	121.0

It is necessary, therefore, to know whether the pairs chosen were representative of the entire groups. Table II compares the 240 pupils who took all the tests and the 206 pupils whom it was possible to pair. The nineteen pupils in School A who took all the tests had mean scores as follows: 42.4 on the absolute scale into which the in-

telligence-test scores were converted, 34.9 on the initial history test, and 85.0 on the history-comprehension test; they had a mean composite score of 133.9. Of these nineteen pupils, thirteen were paired with pupils in School B. The mean scores of the thirteen paired pupils in School A were as follows: 39.5 in intelligence, 31.4 on the initial history test, and 83.8 on the history-comprehension test; their mean composite score was 126.0. There is a difference of 2.9 points between the mean scores in intelligence of the nineteen pupils and of the thirteen pupils of the nineteen who were paired with pupils in School B. The other differences are as follows: initial history test, 3.5; history-comprehension test, 1.2; and composite score, 7.9. There are similar differences between the total group and the paired group in Schools G and I. In the case of the other schools the means of the paired groups are very close to those of the total groups. To secure comparable pairs in Schools A and B, G and H, and I and J, it was necessary to select the pupils in such a way that the paired groups in Schools A, G, and I were not as representative of the total groups as were the paired groups in the other schools. On the whole, however, it may be said that the paired groups were representative of the total groups.

To measure just how much one method was superior to the other, if at all, McCall's technique of the equivalent-group experimental method<sup>1</sup> was used, each set of paired schools and the major groups being considered separately. The same form of the Gregory Test in American History that had been used as an initial test was used to measure the progress made. The means and the standard deviations of the initial and final scores were calculated; the difference between the means was found; and the school in whose favor the difference existed was indicated. The experimental coefficient (E.C.) was calculated, and from this the approximate chance value that the method used was significant was derived.

The experimental coefficient was found from the formula  $E.C. = \frac{Dm}{2.78SDD}$ , in which  $Dm$  equals the difference between the means of the final scores on the Gregory test; 2.78 was arbitrarily chosen to make an experimental coefficient of 1.0 indicate with

<sup>1</sup> William A. McCall, *How To Experiment in Education*, especially chap. vii. New York: Macmillan Co., 1923.

practical certainty that the one method is superior to the other; and *SDD* indicates the standard deviation of the difference, a term showing the reliability of *Dm*.

McCall says:

Since some statisticians wish to state probability in terms of *chances* that the true *D* is above or below zero or above or below any defined point, Table 19 [Table III in this study] permits the conversion of experimental coefficients into statements of chance. This table says, for example, that, when the experimental coefficient is 0.3, the chances are 3.9 to 1 that the true *D* is above zero if the obtained *D* is above zero, or below zero if the obtained *D* is negative.<sup>1</sup>

TABLE III  
METHOD OF CONVERTING AN EXPERIMENTAL COEFFICIENT  
INTO A STATEMENT OF CHANCES

Experimental Coefficient	Approximate Chances
.1.....	1.6:1
.2.....	2.5:1
.3.....	3.9:1
.4.....	6.5:1
.5.....	11:1
.6.....	20:1
.7.....	38:1
.8.....	75:1
.9.....	160:1
1.0.....	369:1
1.1.....	930:1
1.2.....	2350:1
1.3.....	6700:1
1.4.....	20000:1
1.5.....	65000:1

When the experimental coefficient is 1.0, the chances become 369 to 1, and it is almost certain that the difference is significant. When the experimental coefficient is less than 1.0, one is probably justified in assuming that the factor in whose favor the difference exists—here the contract method—is more effective than the other factor—here the ordinary method. The nearer the experimental coefficient approaches zero, the less probability there is that the contract method is superior.

Because of lack of space, the detailed comparisons of individual pupils in the various groups are omitted. Table IV, however, sum-

<sup>1</sup> *Ibid.*, p. 155.

marizes the results. This table is to be read as follows: In School I, which has a difference of 9.21 points in its favor as compared with its paired school, the standard deviation of the difference is 4.31, and the experimental coefficient is .769. This shows the superiority of the contract method (CM) over the ordinary method (OM), the chances being 75 to 1 that the difference in method was significant.

#### CONCLUSION AND DISCUSSION OF RESULTS

The purely quantitative facts show that in four of the five pairs of schools, the chances range from 1.6 to 1 to 75 to 1 that the contract method was a significant factor in the superiority of the school using the contract method over the school using the ordinary meth-

TABLE IV  
CHANCES THAT THE SUPERIORITY IS IN THE DIRECTION OF THE  
OBTAINED SUPERIORITY

Group	D	SDD	E. C.	Superiority	Chances
School I.....	9.21	4.31	.769	CM>OM	75:1
School D.....	6.30	4.23	.536	OM>CM	11:1
School E.....	1.73	3.40	.183	CM>OM	2.5:1
School A.....	2.60	5.57	.168	CM>OM	2.5:1
School G.....	2.25	6.70	.121	CM>OM	1.6:1
Major Group X.....	1.01	1.79	.203	CM>OM	2.5:1

od. In the one case where the school using the ordinary method was superior, the chances are 11 to 1 that the difference in method was significant. When the major groups are compared, the chances are 2.5 to 1 that the contract method played a significant part in the superiority of Group X. Therefore, the net result of the experiment is that a tendency is revealed in favor of the contract method. The statistical calculations do not show that this tendency is highly significant.

There are certain facts, however, not possible of inclusion in statistical terms which lead to the conclusion that the contract method was more successful than the objective data alone indicate. In the first place, the teachers using it were unfamiliar with the details and made mistakes of commission and omission that would not be made again. This is attested by the teachers themselves and shown in their letters during the experiment. The odds were against



the contract plan because of the teachers' lack of knowledge of the problems involved. Dependence on the inanimate instructions and guide sheets was a poor substitute for an intensive knowledge of the theory lying behind the new method of teaching and experience in using it.

Furthermore, the library facilities, though meeting stated requirements, were far from sufficient in the field of history. The schools using the contract plan suffered from this handicap more than did the other schools, for the success of this plan depends to a great extent on the possession of abundant reference material. All the teachers using the plan reported inadequate library facilities. What may be called a social-science laboratory is an absolute essential for the success of the contract method.

The results of informal tests designed to measure mastery of facts and also creative ability are not included in the data presented for two reasons: first, they were subjective, and it was not thought desirable to mix subjective and objective data; second, since many pupils missed one of the six tests, the number of cases with complete data is materially reduced. On the basis of these tests the pupils working under the contract plan showed superior results.

Tables showing the results in the case of individual pupils, omitted because of lack of space, show that the contract plan tended to increase the variability of the scores and to create greater heterogeneity among the pupils. In other words, some of the pupils had to be content with the bare essentials or were satisfied with the essentials and did not get increased training by negotiating the upper challenges. Many of the more capable pupils, however, showed a tendency to work up to maximum capacity.

It is significant that all the teachers using the contract method were enthusiastic about it and its possibilities and reported that the pupils themselves favored it. How much of this enthusiasm was due to the novelty of the method cannot, of course, be stated.

The net result of the experiment is rather clearly in favor of the contract plan, since, in spite of the handicaps under which the teachers and pupils who used it labored, better results were secured in the case of four of the five schools and the major contract group than in the case of the schools using the ordinary plan.

## PUPIL APPRAISEMENT OF A SENIOR HIGH SCHOOL COURSE IN ECONOMICS

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Recognizing the need of a type of training which will prepare youth for the unique complexity of modern economic and social life, many thoughtful educators have been urging for a decade that social studies—history, civics, sociology, and economics—be made the core of the secondary-school curriculum. The rôle assigned economics in such a unified program is well phrased in the following paragraphs.

The distinctive contribution of economics to a school curriculum organized around social objectives is the understanding it gives of the processes by which men get a living. . . . Economics, then, promotes a realization of what it means to live together and an understanding of the conditions essential to living together well, because it helps to explain the organization and functioning of an evolving society from the point of view of the social processes of making a living. . . .

Living together well in a democracy will be furthered if its people take an intelligent part in the guidance of the process. It is in this connection that it becomes peculiarly important that there should be a widespread knowledge of economic generalizations. . . . If democracy is to succeed, a large number of its members must learn to form intelligent judgments upon economic issues—to make those wise choices between alternative courses of action which are the real essence of "economy" broadly conceived. They can do this only provided they come to know the general plan of organization of our economic life, and to appreciate the existence and character of economic law in both domestic and international relations.<sup>1</sup>

For three years the writer has guided high-school Seniors through the mazes of political economy. Because this subject deals with large, intensely moving, vital forces, it has a peculiar appeal for the adolescent; moreover, its intrinsic interest and the readiness with which its abstract principles may be adapted to concrete illustration have for him an engaging aspect. Through the study of eco-

<sup>1</sup> "The Contributions of the Social Sciences to the School Curriculum," *Journal of Political Economy*, XXXI (October, 1923), 739-40.

nomics the youth's world assumes new meaning. Indeed, the avidity with which he attacks the study is marvelous.

It is truly interesting to work with zestful, eager boys and girls as they explore the intricacies of economics, a field of learning entirely new to them. Perhaps the most tangible evidence of the unfolding of their minds is the sudden awareness that newspapers contain items of interest other than the sports section, the comic strip, or the woman's page. Such things as graphs, weekly indexes, financial pages, the functions of banks, the workings of trusts and mergers, and other economic phenomena, which probably never before existed for them, now reveal a whole world of new experience.

At the end of the second semester of the school year 1927-28 fifty Seniors were asked to write thousand-word articles on "What Economics Has Meant to Me." An analysis of verbatim quotations from these articles constitutes the major part of this article. Of the many values declared by pupils to have accrued to them from the study of economics, five of conspicuous import emerge. The pupils were unanimous in saying that economics had taught them to read magazines and newspapers more intelligently. Some of their statements are as follows:

Our study of economics started a new train of thought in matters in which I had no interest before. Such general problems as corporations, trusts, mergers, public utilities, stocks, and bonds which the papers, magazines, and other periodicals discuss were never noticed by me. Instead of reading only the sports section and the comic section, I now read items of economic and political interest. I can now discuss them with my dad without having to be ridiculed for talking about something about which I know nothing.

Since studying economics I have been able to read the newspapers with a different point of view. I have been able to see things in the papers I would never have thought of looking at before. For example, I used to wonder what Irving Fisher's Weekly Index was all about. Now I understand and can keep abreast with the fluctuating purchasing power of the dollar.

Economics has taught me to read newspapers and magazines more intelligently. Every evening we receive two newspapers. Formerly, the only pages in them of interest to me were the comic sheet, the woman's page, and occasionally the headlines on the front page. Now, because economics has stimulated my appetite for events and awakened me to a keen realization of the world's affairs, I read both newspapers pretty thoroughly. Before, such words as "demand and supply," "clearing-house," and "stock exchange" meant little to me

because I did not understand them. With my knowledge of economic principles, I can now explain the meaning of many things. I do not regret the hour and a half I now spend reading the newspapers because of the valuable knowledge gained.

Before studying economics, nothing really interested me in the newspapers except probably a serial story and the comic page. I was deriving no education from such articles. Now I read about important happenings. I find that Irving Fisher's Weekly Index is very interesting. To watch the fluctuation of the purchasing power of the dollar holds my close attention.

Another and perhaps the most valuable result, according to the testimony of all the pupils, was that economics had really taught them to think. The adolescent, of course, is not accustomed to draw conclusions from abstract reasoning, but, under adequate guidance, he is thoroughly capable of learning to do so. For such a purpose, the problem method is of value in showing him how to apply abstract principles to concrete situations. How this very coveted objective was achieved is implicit in the following excerpts from the pupils' papers.

In economics one cannot give a mere "Yes" or "No" for an answer. Each answer must have a strong backing and a good example. This example-giving became a habit with me, and I began doing it in my other classes. I found that it was a wise habit, and my daily recitation marks rose. Hasty conclusions and "beating around the bush" had been one of my faults as well as the fault of many other pupils. This cannot be done in economics for the answer must be definitely "Yes" or "No" and why.

Economics does wonders in broadening the mind and teaching one to think more clearly. No economic problem can be solved with loose thinking. To answer any question advantageously, that is, the way our teacher instructed us to, takes clever thinking and sound reasoning, and then the question had to be answered definitely in steps. By "steps," I mean no jumping around. Step 1 had to be given and discussed thoroughly and then Step 2 in the same way. No one, I am sure, can deny the good method in such teaching.

Economics has also taught me how to think properly and to reason. Reason! That is the biggest thing it has taught me to do. It sounds quite simple, but it took me several weeks just to learn that, and yet I don't know all there is to know. When we have thought questions to answer, we must use our reasoning power, and that means to discuss both sides of the question. For example, people say quickly that large-scale production is advantageous, but that is not the whole story. Large-scale production is also disadvantageous. In the case of a monopoly, it gives a special group of persons the power to crush competing

men and companies, and the people may be forced to pay higher prices and the employees to receive lower wages.

Economics has taught me to reason. Why do prices go up or down? If other things are equal, why does a change in the demand for an article cause a similar change in price? Why does a change in supply cause an opposite change in price? Before I studied economics this was all Greek to me, but now I can reason about the working of this economic law with intelligence. My almost new ability to reason has helped me in my other work. Brief-making in oral English especially calls for reasons. Every statement in our debates must be supported by a definite reason, and it is up to us to give good ones. I positively assert that learning to reason in economics has helped me to make better marks in all my classes.

Economics has trained me to think to a greater extent than ever before. Our work was so arranged that we were given a number of ways to show our ability to grasp the subject. One of the most important was the set of problem questions given to us by our teacher at certain intervals the answers to which we had to reason out for ourselves. The true-false tests given once a week required quick and accurate thinking on the part of the pupil. Completion tests were excellent in training the pupil to think in an orderly manner and to detect all the important details of his reading. These methods of learning, combined with the memorizing of the scientific definitions and the giving of oral reports, were effective devices for promoting the ability to think.

Probably the most important thing economics has done for me is to broaden my mind and cause me to think. The most complicated affair in the world to me had been the United States banking system. I had not the slightest conception of a bank except the childish idea that it was a place to keep money. After studying Fairchild and listening to our teacher, it became clear that the bank has other functions besides that of storing money.

Economics has taught me not to be dogmatic by making assertions without basing them upon reasons. At the beginning of the year I discussed economic problems but did not substantiate my statements. My mind had not been trained to follow one line of thought until it had exhausted an idea. New ideas about our economic organization have enabled me to discuss important current events with people of intelligence.

I have learned to reason—to organize ideas and to work things out for myself. No other subject that I have taken has made me think as much as economics. It taught me the necessity of proving all my statements. All of this will help me in my other subjects, especially oral English, for in debating every statement must be proved.

A third objective of great educational value accomplished in the half-year of study of economics was the training and quickening of the power of observation.

To my mind economics has meant more to me than any other subject in my Senior year. The time was when such economic principles as wealth, money, capital, demand and supply, value, and production were interpreted in loose and inaccurate terms and meant little to me. Economics has "opened my eyes," that is, has trained them to see the economic conditions existing all over the world. Fairchild says that "the sole purpose of [his] book is to aid the beginner in acquiring clear and dependable knowledge of the important facts and the fundamental principles of the science of economics to the end that he may be able to adapt himself intelligently to his economic environment and to face the economic problems of life with intelligence, self-reliance, and the zest of broad interest." I can truthfully say that, so far as I am concerned, the book has achieved its purpose.

There are countless people living today who are blind not because they have lost the power of vision but because their sight, piercing only the surface but never the nub of matters, has not been *trained* to see. The botanist observes in a small patch of ground many things which escape the average person. The economist, with his clear conception of economic matters, the artist, with his sense of artistic beauty, possess far greater insight than you or I because each has been trained in his respective art. Before studying economics, I, too, would have been placed in the same category with those people who "have eyes but see nothing."

Economics develops a keen sense of observation. The writer found himself looking into the cause of the recent British coal strike with unusual interest; he noticed the rise of coal prices caused by a decreased production of coal. This affected the entire trade of Great Britain and caused a depression in the economic, social, and political régime of Great Britain. All this the writer observed with intense interest because of his newly acquired knowledge of economics.

A fourth and scarcely less valuable result than the foregoing was the uprooting of many preconceived economic fallacies imbedded in the pupils' minds. Indeed, any person, however well educated he may be, is likely to entertain wrong conceptions with regard to economic laws if he is untutored in the science. As a result, economic errors have been the source of enormous evil. Of the disastrous possibilities of such evil—material, moral, and spiritual—there could scarcely be a more impressive example than that revealed by the appalling social and financial conditions into which unsound currency plunged post-war Europe. Illustrative of fallacies held by those untaught in economic principles are the following; these began with misconceptions about the subject itself.



I found in the first few days of the study of economics that for the most of my life I had been reading, listening to, and even discussing economic problems. This study has meant the correction of many fallacies, which is one of the biggest benefits I have derived from it, for, when we change our old incorrect ideas and formulate new ones, we are then getting an education.

In the papers one can always read of the trade between nations. This I believed was the trade between nations, but, through the study of economics, I have learned better. This trade is not between the nations but between the residents of the nations; many others no doubt have had the same impression, and many have not been corrected. I, like many others, also thought that exports were more beneficial to a nation than imports, but, after being taught better, I cannot realize how I could have made such a mistake.

Formerly, I did not know why the value of money fluctuates, and I knew nothing whatever about our banking and coinage systems. Corporations, monopolies, and trusts to me always stood for evil, to be avoided. Therefore, when the time arrives for me to participate in civic affairs, I shall be able to do so with an increased knowledge of my economic environment which will enable me to become a better citizen, which, in turn, will help me to serve my country better.

Before I studied economics, the subject was rather hazy. I thought it dealt with general economy as practiced in the home, such as cooking, sewing, and the planning of a home.

Economics has meant more to me than any other subject I have studied this year. It has caused me to think. I have found that scientific terms such as "wealth," "money," "capital," and "value" have a broader meaning in economics than in everyday usage. No longer do I think of "wealth" as money, "money" as dollars and cents, "capital" as money invested in factories, or "value" as the price of an article. Economics has given precise definitions to these technical terms and therefore has cleared my thinking of many fallacies.

My mind is cleared of many fallacies that tend to make one inefficient. I no longer believe that exports are more important than imports, or that a protective tariff is desirable or that it increases manufacturing.

Before studying economics, I, like many others, thought that the producers could regulate prices at their will, but I have since found that this is impossible, that supply and demand fix market prices except in the case of a monopoly. Never before had I heard of elastic currency or of the law of supply and demand being discussed in any classroom, although they have a great deal to do with our daily lives.

A knowledge of economics has enabled me to understand many things about business and has corrected many fallacies I entertained with regard to commercial and governmental affairs. My idea of the real functions of banks was very vague. I had not even realized that the United States has a monetary

system of gold monometallism, much less understood the system and the part played in it by the various kinds of money. And I had considered the protective tariff indispensable to manufacturers.

A fifth but not inconsiderable goal attained by pupils from the study of political economy was the clarifying of other subjects in the curriculum. There is perhaps no study in which the relations between various phases of living are more clearly shown than in economics. It touches all sides of life not casually but intimately, and the cultured individual of today is one who can discern relations before they become self-evident. As the following quotations show, a knowledge of economics is almost indispensable to an understanding of history and civics.

I have found economics a great help in my other studies, especially history. Much of our history is a review of economics. During the Civil War, for instance, we learned that there was an inflation of paper money. The United States government issued enormous quantities of paper money called "greenbacks." These were not secured by standard money. Their value continued to decrease with each new issue until they were worth very little. The increase in currency caused a decrease in money value. Understanding this, we can picture the effects the inflation had on both the finance and the commerce of the country. While history mentions only the issue of the greenbacks and the effect they had on the country, economics treats each step separately and gives a full explanation of each. In studying the panic of 1837, I found economics very useful. Having studied an entire chapter on "speculation," I can more easily understand the nature of the affair. I really think that one must know something about economic principles before one can thoroughly understand and appreciate history.

Economics is helpful, especially in American history. For example, in our history textbook it says, "During the Civil War, prices were very high." If I had seen this statement before studying economics, it would have meant to me only what it says, but now I have learned that prices were high because the government had at that time added about four hundred million dollars in United States notes (greenbacks) to the money already in circulation. The result was an increase in prices for, since there was more currency to perform the same amount of exchange, the value of each unit of currency declined and the price level rose.

As an aid in the study of other subjects, economics has been of valuable assistance to me. In English, when we studied Chaucer, we learned about the life and customs of the Middle Ages. Through my study of economics, I compared our present-day conditions with those of the Middle Ages, and thus I had a clearer understanding of the life of that time. But the subject in which

economics has proved of the most value to me is history. We learned that between 1830 and 1841 many useful inventions were made, railroads were built, and labor unions were formed. Economics has helped me better to understand the significance of these happenings.

Not long ago I was of the opinion that English was the only worth-while subject taught in high schools. During this year I have realized that economic conditions form the basis of many of the greatest works of literature. Dickens' *Hard Times* and *Oliver Twist* deal with a period in English history when labor problems due to the Industrial Revolution were influencing a whole nation. It is surely a marvelous realization to read these and other novels after having studied economics.

Recently in the civics class the discussion of monopoly arose. Several pupils maintained that, if monopoly controlled certain industries, it would tend to raise the prices. Their argument was that, whenever there is a monopoly, its owners raise the prices of their articles. They did not take into consideration the fact that there is a limit even to monopolistic prices and that, after a certain price is reached, the public will refuse to pay more, or that competition may arise. Nor did they consider that, while the monopolist controls supply, he cannot control demand. Of course, not having studied economics, they could not discuss the subject intelligently. Such problems as this are always coming up in the civics class. We have to deal with problems concerning banking, money, railroads, socialism, and many other topics the solution of which requires some knowledge of economics.

That the five outstanding benefits to pupils studying economics which are aptly and intelligently phrased in the foregoing quotations are of great educational value will probably not be disputed by thoughtful persons. In sum, then, the course gave a richer content to the pupils' extra-curriculum reading; it taught them to reason in a more systematic way; it quickened their powers of observation; it cleared their minds of preconceived fallacies; and it gave new meaning to related subjects, particularly history and civics. Surely these are worthy goals in the study of any subject in a secondary school.

Careful analysis of pupil opinion reveals that many values aside from the foregoing accrued to these Seniors. For instance, many of them gradually became cognizant of the value of economics in training for citizenship. One pupil wrote, "There are many difficult subjects, such as Latin, chemistry, and geometry, that strengthen the mind as well as economics, but no other subject has the extra quality that enables the pupil, besides having a broadened mind, to have

at his command so valuable a store of knowledge that will always be useful, in fact so necessary, in later life." Another pupil wrote, "Those of us who have studied economics will be better citizens because we shall have a better understanding of voting than those who have not studied the subject. We, the coming voters, must understand the great economic problems in order to vote intelligently." A third pupil wrote, "One cannot really be an intelligent citizen and understand the problems of the day if one has not studied this subject." A fourth pupil wrote, "Even though I became somewhat discouraged at times, I fully appreciate the study of economics and know that I shall realize its value still more as I grow older and take my part as a citizen of the United States." A fifth pupil wrote, "The science of economics makes for more intelligent voting. This, in itself, is an important fact, for the more intelligently future generations vote, the more intellectual government the people will have."

Indeed, the most vital contribution of economics is the training of the individual for the duties of citizenship. Since the dominating force in American government is public opinion and since the most important problems confronting voters fall within the domain of economics or political science, it is obvious that intelligent voting cannot be expected without adequate understanding of these subjects. Lacking knowledge of economic principles, no person can form a constructive opinion on many problems at issue today.

The adolescent, then, trained to evaluate intelligently the hard, cold facts of his economic organization is less likely to become, when he attains voting age, fertile soil for the sowing of radical ideas. He will be less susceptible, moreover, to the glamor of economic utopias, for he has been taught that, while the present economic system has flaws, it has evolved its present efficiency in the difficult school of experience. Furthermore, he is led to conclude that progress through evolution is preferable to progress through revolution.

The semester course in economics also established for the pupils a tangible point of contact with their elders. A brilliant seventeen-year-old girl wrote:

Before studying economics I was unable to see the really vital points in many important articles in the newspapers and magazines. I had not been

trained to see any but the definite facts given in the articles. I had no idea of the economic significance of various occurrences; so I seldom read beyond the headlines. I was not only unaware of the economic meaning of a problem but woefully ignorant of current events. Now my knowledge of economics enables me to understand what I read. This understanding has, of course, stimulated my interest, and, as a result, I am very well posted on the daily happenings. At least, the study of economics has made my family respect my opinions regarding various happenings, and that is all I could ask of any subject.

A bright sixteen-year-old girl said:

Last week I went next door to visit our neighbors. Mr. ——— and I chatted for a while about the weather and other inconsequential matters. As our conversation began to lag, I brought up the Chinese question. Soon we were both discussing the question heatedly. After talking over a few other economic problems of the day, I started to leave. Then Mr. ——— said to me, "You surprised me very much tonight. I had no idea that the young people of today are so wide-awake and able to talk so intelligently on subjects like those we were arguing about this evening."

A third pupil wrote:

With a knowledge of economics there is always something to talk about, for nearly everyone is interested in what is going on, particularly older people. Very often when younger people are thrown with older people, they do not know what to talk about. In school they are taught Latin, French, English, chemistry, botany, etc. These are not of much interest to older people; so they and the young people bore each other; whereas, if they had taken economics, they would have something to talk about.

It has been argued by many, particularly college professors, that economics is too difficult and abstract for high-school pupils to understand. Others have opposed its introduction into the secondary-school curriculum because of the controversial nature of many economic principles. To objections of the first type one may justly reply that they are merely opinions which have no basis in experience; most of the other opposition comes from those who have never studied the subject themselves. Economics is indeed a science which is peculiarly susceptible to poor teaching and one which is, moreover, injured irreparably thereby. Under skilled instruction, the difficulties in presenting this subject largely disappear.

The abstruse character of political economy will not deter bright pupils from studying the subject. In this survey nearly every pupil said that the subject was not too difficult and that, while it was

"hard" and they had to work, it was worth the struggle. Typical of the reactions of all the pupils was the following. "We always enjoy the things for which we work hard." That the interest aroused in this subject is probably permanent is evidenced by the fact that many of the pupils expect to continue their study of the subject in college as well as by the fact that many expressed a wish that the subject extend over a whole year instead of a semester. Representative attitudes are expressed in the following quotations.

The subject of economics is very interesting, and the knowledge I have obtained from the necessarily limited study of it permitted in this short course has aroused my desire to know more about this science, and I intend in the future to continue my study of this subject.

I have found that a knowledge of economics is very vital, and I wish to further my knowledge of it in higher education.

It is such an interesting subject and there is so much to learn about it that I think it should be taught for one year instead of a half-year.

Economics is far too interesting a subject to give but one-half year to it, and I, with the rest of my classmates, think that the course should extend over the whole school year.

In conclusion, it is clear that the social sciences, including economics, should occupy an important part of the secondary-school curriculum. The fundamental purpose of such a group of studies is to enable the individual to adapt himself more intelligently to his environment. This they endeavor to accomplish by teaching such ideals and attitudes as will develop social intelligence—the ability to work co-operatively as a member of a highly complex, interrelated, interdependent society. Modern machine-made civilization with all that it implies makes such an objective doubly imperative. Thinking in terms of social effectiveness, the wise school administrator will not leave future citizens stranded on an island of ignorance regarding their civic duties. Perhaps, then, in the social sciences, adequately taught, will be found a panacea for many ills that afflict society today.



## METHODS EMPLOYED TO STIMULATE INTERESTS IN READING. IV

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### 5. SYSTEMS OF REWARDS AND CREDITS

*Contests.*—Rewards and credits are used extensively by both teachers and librarians. Contests of many kinds are organized. Among the types of contests reported are (1) advertisement reading, (2) author, (3) book plate, (4) book review, (5) card catalogue, (6) character, (7) class (rewards to the class receiving the most reading certificates), (8) essay, (9) magazine book review, (10) magazine (identifying by covers), (11) newspaper (on content), (12) outside reading, (13) point, (14) registration, and (15) vacation reading.

A second-grade teacher in the South reported that she has children bring advertisements for competitive reading, which she posts on the bulletin board with the words, "Mary can read this; can you?"

A public librarian in charge of a Michigan high-school branch conducts character contests, for which the only reward is a "write-up in the school paper." She issues a list of fifty characters. The readers give the titles and the authors of the books in which these characters appear.

A public librarian in Ohio conducts two different kinds of contests. The first is a registration contest, which "the children initiated themselves. They worked to see which school in the district could have the most new library users by a given date. For the winning school a special entertainment was given by two clever young men who were patrons of the branch library."

The second contest, "A Trip to California," was undertaken to develop an interest in nature books. The librarian said:

Those who entered the contest enrolled as travelers. They were given badges, "I'm going; are you?" A list of travelers was posted prominently in the children's room along with a large map of the United States, on which

pushpins marked the children's progress. Each book read was one stop. Those who read six books for six stops were given a surprise—a party. They were shown stereopticon views of California scenes and played games.

A unique contest devised by a public librarian in Indiana was entitled "Rainbow Reading." The colors of the spectrum were used to represent different classified groups of books—for example, red, biography; yellow, nature books and animal stories; etc. In the library, books of the various classifications were displayed under the appropriate colors. In the contest each reader was required to read one book for each color and enough additional books from any color classification to make ten.

*Rewards.*—Teachers offer many kinds of rewards for reading. Achievement points, bookmarks, buttons, certificates, diplomas, extra credits, gold stars, places on honor rolls, and special prizes are among the rewards given to those who meet set goals and requirements.

Among the devices employed very frequently is that of awarding credits or points in such a manner as to favor the better kinds of literature. One teacher wrote:

A number of our pupils begin by reading easy books. Seeing, however, that that is a slow way to raise their credits, they select books that we consider more valuable. We feel that, when a child has read a few of the more valuable books, he will become interested in books of that kind.

The general impression made by most of the reports received is that quantitative reading is given great emphasis in classrooms and libraries. Much less is said about the quality of reading although attempts to control it are made. The question may be asked: Does the interest in rewards for quantitative reading eclipse the interest in qualitative reading? The whole question of giving credit is a sharply mooted one. The permanent values resulting from reading experiences stimulated by inducements and rewards need to be accurately appraised. Those who claim that reading should be stimulated "for reading's sake" need similarly to appraise the values of their methods. Final judgments cannot be made on the basis of the meager information that is available at present.

#### 6. ADVERTISING METHODS

Effective advertising stimulates interests. In the world of business the power of advertising to create new business has been demon-

strated repeatedly. The value of advertising devices in the field of reading cannot be successfully challenged. Their effectiveness is known, and they are employed widely. They are of two kinds—direct and indirect.

*Indirect methods.*—Some of the most subtle advertising is done indirectly. One teacher who had a very difficult class to teach advertised through the acknowledged class leader. She wrote:

I succeeded in getting this leader to read a book of travel. He pronounced it the best book he had ever read. Before the term was over every boy in the class had read that book. From there it was easy to lead them on to other and better books.

*Direct methods.*—Many direct methods of advertising books and magazines are utilized by teachers and librarians. These include the use of bulletin boards, pictures, posters, charts, objects, displays, book lists, school and local papers, slides and films, and talks by librarians and others.

*Bulletin boards.*—The bulletin board is very popular and is used in innumerable ways. A special use of it is to develop ability to read newspapers intelligently. A junior high school teacher in Maryland said: "The bulletin board is used at first by the teacher to illustrate good selections. Then it is turned over to the pupils, who vie with one another in having the best display." A second-grade teacher wrote that she posts clippings on the bulletin board "arranged like a newspaper."

Bulletin-board displays are often ineffective because the materials posted are poorly arranged. Those in the advertising business know the value of white margins, style of display, kind of type, etc. There is need for investigation and study of effective schoolroom and library bulletin-board displays so that good models may be available for the consideration of those who desire to secure the best results from the use of bulletin boards.

*Pictures.*—Large use is made of pictures. Pictures of characters in books are displayed; illustrations for books are made by pupils; blue-print pictures of literary works are employed in literature classes; pictures of flowers and birds are displayed to stimulate interest in nature books; moving-picture stills are secured to illustrate literary works in English classes; pictures are shown for children to

label with phrase titles; children are assigned the making of picture book reports; pupils are asked to prepare picture tours; post cards illustrating readings are mounted; recognition tests based on pictures cut from magazines are given; and word pictures are prepared by pupils from selections read to them by their teachers.

A junior high school teacher in Massachusetts related her experience with blue-print pictures of *The Lady of the Lake*. She said:

I mounted them on white paper and pasted them on the blackboard in such a position that the pupils might have no difficulty in examining them. To my pupils I said nothing about the prints. There was no necessity for doing so, for, as soon as the children entered the room, their attention was at once arrested. They flocked to the blackboard. Informal discussion followed. The duel scene between Roderick Dhu and Fitz-James was one of the prints provocative of much comment, especially among the boys. When the pupils finally consented to take their seats and allow me to begin the lesson, my fears as to how they would "take" *The Lady of the Lake* had vanished.

*Posters.*—The possibilities of posters are unlimited. A public librarian in an Ohio junior high school branch described her method of using posters as follows:

Posters are chosen when possible to fit a particular holiday or season, to illustrate a poem, or, as is most frequent, to call attention to some particular class of books. A picture, an arresting caption or quotation, and often a list of suggested book titles are the usual ingredients of these posters.

The principal of an elementary school in Oregon stimulates interest in little-used books by poster advertising. She wrote:

Books that are not readily taken from the shelves can be advertised to get them started. For example, I found that the percentage of biography books read was low. I made a bright poster bearing the words "Try Biography." This I placed on the bulletin board and grouped posters made from book wrappers about it. I gave a short talk to each class about the books for the grade. I found many more biography books were taken. This interest in biography has continued.

*Book displays.*—Many ingenious book displays have been arranged in schools and libraries. Some of the methods employed include the following: instituting book parades, displaying bookstore collections, arranging corridor exhibits, featuring books for holidays, exhibiting beautiful illustrated editions, setting out books for inspection and reservation, exhibiting old and interesting magazines,

displaying one book at a time, displaying books in special book-racks, displaying books on the reading table, displaying books under the heading of special subjects, and exhibiting books by state authors.

A branch librarian in an Ohio city wrote:

We have two permanent displays for books that are always in demand. One, "Books Other Girls Like," is for the girls; the other, "Tales of Adventure," is for the boys. Other displays that have seemed successful have been "Sports, Hobbies, and Handicraft," "For You Who Love Heroic Things," "Peeps at Many Lands," "Making the Past Live Again," "Heroes of the Sea," "School and College Life," "Polar Adventure," and "Funny Stories."

A high-school teacher in California advises "displaying a *few* books attractively near the charging desk." She said:

I find a few books better than a large number. The little easel put out by Gaylord's that holds one book with the words "Have You Read This?" will be emptied every ten minutes on a busy day.

Some librarians reported runs on books displayed and advertised. Experiments might be made whereby books which are good but are seldom read may be made the subjects of display. If runs occur, additional copies might be brought from the various branches of a system and pooled in one branch for distribution there. Later the collection might be moved to another branch and advertised there by means of similar attractive displays.

*Book lists.*—Book lists of endless varieties are prepared for circulation among young readers. Children are asked to prepare special bibliographies; reading lists are put on bookmarks; lists are prepared which provide for differences in capacity; children are asked to prepare Christmas lists for others; correlated lists are posted for special classes; annotated lists are posted on classroom doors; gift lists are prepared at the holiday season; book lists in the form of greeting cards are sent; individual lists for pupils are prepared; lists of magazine articles are posted; mounted lists that may be turned and read are displayed; appropriate lists are sent to parents; course-of-study lists are distributed; marked lists are utilized; titles of literary merit are marked with stars; summer-reading lists are made available; and attractive table lists are displayed in reading-rooms.

Among the many suggestions received was that of an enterpris-

ing librarian who prepared lists of the favorite books of well-known people when they were boys and girls.

*School and local papers.*—Good reading materials are regularly advertised in some communities in school and local papers. Literary articles and editorial writing are featured. An elementary-school principal in Alabama said concerning the publishing of a school paper that "to write editorials children must read editorials." A high-school librarian in Nebraska wrote that, if a school paper is published, "the reporter of the journalism class has an opportunity to feature articles on the library."

*Red-star books.*—A public librarian in Minnesota provides "a red-star section of best books. In this section entertaining books of a high class from both the juvenile and the adult departments are shelved in the adult department. These include fiction, biography, travel, nature, science, etc. Each book is marked with a red star. We have found the plan especially useful in guiding the boy who considers himself too much of a man to use the children's department but who is wholly unable to select from the adult books."

*Mock salesmanship.*—Many teachers have pupils attempt to "sell" books to their classmates. An eighth-grade teacher in Illinois conducts "Sell-a-Book" lessons during oral-composition periods in which a child tells the other pupils of some book found especially interesting for the purpose of 'selling' the book to them. The child relates some thrilling episode or quotes or reads some passage that is especially beautiful or funny or otherwise of interest."

*Slides and films.*—Visual methods of advertising have both direct and indirect possibilities. Films or slides may be used to advertise good literature directly, or they may be employed to show pictures concerning which children are asked to find interesting books. A fifth-grade teacher in Ohio uses "lantern slides in teaching geography." She said, "Place the list of books and magazines on the board and the material on the table and tell the children to read about the picture they saw."

*Library talks.*—Advertising by talks is common. Talks are given on bookmaking; talks are prepared on reading materials which pertain to current exhibitions; talks are given to mothers' clubs and parent-teacher associations as well as to children in classrooms; and



talks are often given on specific books. One public librarian in addressing school groups "emphasizes the difference between books which are mere 'time-killers' and books which are 'too good to miss.' "

#### 7. CIRCULATION OF READING MATERIALS

The circulation of books and magazines is by no means a simple matter. It involves more than the mere checking in and out of materials. Circulation is most effective when the greatest number is served and the greatest volume of materials is distributed and used. In schoolrooms exchanges are quickly made, for the record-keeping there is comparatively simple. In centralized libraries or branches the keeping of records is a little more complex. In most libraries library privileges are extended only to those who have complied with the requirements and received library cards.

*Library cards.*—Several methods are used to initiate children in the use of libraries. Librarians not only go to the schools to urge children to use the libraries, but teachers take their pupils to the libraries to secure library cards. Some teachers practically compel children to get library cards when they assign correlated readings which can be secured only at a public library.

*Overnight circulation.*—Much material which must be available during school hours because of the large demand is given circulation by permitting pupils to draw it out at the close of the school day for overnight use. Such material is to be returned at the opening of the next school session.

*Child librarians.*—A few reports indicated that child librarians are appointed in schools. One public librarian also stated that she uses children as librarians. The fact that this method is little used points to the need of further experimentation and study. A current theory is that children should participate in school government not so much because their help is needed or because their management is made easier but because laboratory experiences are provided that will fit the children for civic responsibilities. If this point of view is sound, there seems to be good reason for encouraging participation in the management of school libraries. No doubt such participation will tend not only to develop responsibility but to stimulate a greater interest in books and magazines. To that end experiments might be

conducted to determine whether or not such responsibilities stimulate the interests in reading of pupils who are permitted to act as classroom librarians and whether or not there is any appreciable effect on the other members of the class, who are merely patrons of the classroom library.

*Magazine subscriptions.*—Schools invariably seem to have too little magazine material for circulation. Except in poor communities, the difficulty is usually overcome by inducing parents to subscribe for magazines suitable for their children. A fifth-grade teacher in the state of Washington acquaints children "with various children's magazines by distributing sample copies sent by publishers in large enough quantities for each child to have a copy."

#### 8. TRAINING WORKERS

Good leadership is crucial. Teachers and librarians emphasized the need of workers who are well qualified for their work. They pointed out that, to stimulate interests in children effectively, the proper guidance must be provided. A school librarian in Nebraska wrote, "Nearly everything depends on the librarians, their cultivation, reading, attitude toward books, training, system, order, desire to help, knowledge of how to help wisely, judiciously, tactfully, etc." A librarian in Missouri said, "The librarian must meet standards, must have high literary standards, and must know literature for children."

Experience has shown that not all who are in library work are properly qualified. There is need for special library training. The head of a school department of a public library in Oregon said:

A class in children's literature is the most vital method I have of promoting good reading among children. Ninety per cent of the students in my class are teachers in elementary schools of the traditional type or teacher-librarians in platoon schools. My object is to make them familiar with children's books of all types and to develop in them a good critical attitude toward children's books. In the six-week summer-school course I endeavor to cover briefly the entire field of children's literature. . . . Terman and Lima's *Children's Reading* is being used as a textbook.

#### 9. SPECIAL FEATURES, ACTIVITIES, AND PROGRAMS

A wealth of special features is employed by teachers and librarians to stimulate interests in reading. Debates, assemblies, drama-

tizations, games, projects based on reading, literature maps, literary weeks, and story-telling hours are among the devices used.

*Dramatizations.*—Presenting plays, staging dramatizations for Children's Book Week, having children impersonate characters, having class guess books from children dressed as favorite characters, having pupils dramatize manners and customs, letting children dramatize nursery rhymes, assigning children parts in pageants, having pupils write plays or pageants on the basis of the reading done, and having children write scenes on selected incidents in stories are some of the possibilities in dramatization.

A high-school teacher in Georgia wrote:

One of the most successful of my projects was carried on last year in a tenth-grade class during the study of *As You Like It*. During the first reading of the play (done entirely in class) I assigned to the boys the study of the Elizabethan theater and to the girls the study of the costumes of the period in which the drama was acted. Reference books and pictures were placed in the classroom on reserve. After several days of study volunteer groups of boys began work on a stage representing that of the Globe Theatre, and each girl began dressing a doll to represent her favorite character. After the completion of the well-equipped stage, the best dolls were chosen and used to set the stage for the various scenes. The analysis of the play was thus made both easy and entertaining, and all were eager to read another of Shakespeare's dramas.

*Children's Book Week.*—A Wisconsin supervisor of English reported the following interesting way of giving emphasis to Children's Book Week. An VIII B literature class wrote a playlet in which "the scene represented the school library. The stage was arranged to look as much as possible like the library except that at the back was a huge book, made by the manual-training department out of beaver board. The cover of the book was painted and lettered to represent the cover of our supplementary-reading list and opened outward like a door. Members of the class that wrote the play took the parts of the librarian and children who came to the library looking for point books. When a child asked for a good point book, the librarian suggested one and opened the 'door' of the book, and there was a living picture showing a scene from the book mentioned. About thirty tableaux, each representing a different book, were given in this way."

*Playing games.*—Many games are ingeniously used in connection

with reading activities. The librarian of a university elementary school in California wrote:

A colored picture from a book jacket or a discarded copy of a book is pasted on a large card and numbered. Sometimes a quotation from the book is written on the card but not the author or title. The card is passed to a group of children, and the one who can recognize the book from which the picture is taken stands and tells the other children the author and title and something about the book. Then the card is passed again so that all may see it.

A fourth-grade teacher in Ohio allows her pupils to relay story-telling. She said:

If the children are telling stories or giving book reports, I let one child begin the story and go on to a certain point. All are anxious to have a chance to continue the story. They will read the stories or books in order to have a turn.

#### 10. EXTENSION DEVELOPMENTS

Librarians are very active in increasing the effectiveness of library service by extending such service as widely as possible. To this end they send out book wagons which issue periodically books to adults and children at regular stops, send out collections of books to schools for distribution to school children, and send books to welfare stations and other points where people may be found who for some reason cannot go to the central library or to some branch.

#### CONCLUSIONS

The survey of methods employed to stimulate interests in reading reported in this series of articles has furnished data on which a number of conclusions may be based. These are as follows:

1. The teachers and librarians in the country at large are professionally interested in improving their techniques for stimulating, elevating, and making permanent the interests of young people in good books, magazines, and newspapers.
2. In the future, teachers and librarians will share alike the responsibility for taking the initiative in stimulating interests even though that has thus far been considered a primary function of the teacher and a secondary function of the librarian.
3. The responsibility for elevating tastes and making interests permanent is admitted by both librarians and teachers to be a joint function.

4. The list of master methods is not complete. It needs to be checked by a large number of librarians and teachers.

5. All educational workers have developed methods for stimulating interests in reading far more extensively than they have developed methods for improving tastes in reading and for making interests permanent.

6. The controversial points of view which are held concerning some of the methods indicate the need of experimental studies to determine the validity of the methods questioned.

7. More needs to be known concerning the usefulness of methods that are now employed by only a few teachers and librarians.

8. The effectiveness of the work of both teachers and librarians is greatly neutralized by environmental forces which tend to tear down what these educational workers are attempting to construct.

9. The effectiveness of the efforts put forth by teachers and librarians will be greatly enhanced whenever public administrators who are clothed with the necessary authority and powers make available (a) greater physical and material resources in all schools and libraries and (b) the services of competent research specialists in the larger centers to carry on experimental studies which will improve instructional and library techniques.

## ONE FEE FOR ALL PUPIL ACTIVITIES

ERIC OSCAR MAY

Robinson Township High School, Robinson, Illinois

Within recent years practically every college and university in the United States has adopted the plan of collecting from each student at the time he registers a fee for some form of student activity. In exchange for this fee the student is given a book of tickets that admit him to the various student events for which the tickets are issued. The plan has become almost universal for athletics, and in many cases it has been extended to include other student activities. The secondary schools, however, have been slow to see the value of the plan and to adopt it.

After careful study and discussion of the possibilities of such a plan, the faculty of the Robinson Township High School, Robinson, Illinois, voted early in the school year 1928-29 to suggest the plan to the student council. The student council discussed it at some length and decided to submit it to the entire student body. The plan was presented to the pupils by members of the student council and was adopted by an almost unanimous vote.

An activity ticket was prepared, and one was given to each pupil. This ticket admitted the pupil to five home football games, ten home basket-ball games, ten paid assembly programs, one operetta, and one Players' Club play and entitled him to the issues of *News 'N' Everything*, the school newspaper, which is published every two weeks. In all, admittance was gained to twenty-eight different events, the pupil paying less than eleven cents each for these events. If these had been paid for at the regular single-admission price, the total would have been \$8.50. The pupil paid \$3.00 for the ticket, saving \$5.50 if he attended all the events. The pupil may not have been interested in attending all the events, but it is believed that he attended a sufficient number so that the ticket represented a real saving to him.



Two plans of paying for the tickets were devised. The pupils were given until November 1 to pay the sum of \$3.00. Two hundred and thirty-five of the 465 pupils in the school had paid on November 1. The other plan was modeled after the Christmas-club savings plan used by many banks. When the pupil paid twenty-five cents, he was given a card. This card was issued in duplicate, a yellow card for the pupil and a white card for the office record. The cards were so devised that they could be placed together and punched each time a payment of twenty-five cents was made. The cards provided for the payment of twenty-five cents each week from October 1 to December 17. "Pay out before Christmas" was a good slogan to encourage the pupils to keep up their payments. One hundred and ninety-four pupils used the instalment plan.

Every pupil was urged to use one or the other plan. On November 1 thirty-six pupils had not paid for any part of their tickets, but at the time school closed for the Christmas holidays only sixteen pupils were delinquent. These pupils had been using their tickets, and it was expected that even they would pay. Work was found in the community for a number of pupils whose funds were known to be limited, and one philanthropic individual paid for the tickets of two pupils.

The money received was distributed to the various activities in proportion to their expenses and was used to help finance their operation. The school did not receive as much money from the pupils by this plan as it formerly received from them for single admissions. The fee was made as low as it seemed possible to make it and still finance the activities. However, even with all pupils admitted by ticket, the gate receipts were increased. It seemed that the pupils considered that they had free admission and therefore attended all the school events. They brought with them a sufficient number of their relatives and friends to increase the amount received from single admissions. The fact that a copy of the school paper went into every home represented in the school made it much easier to obtain advertising.

The plan has proved so successful that it is contemplated in the future to have the pupil pay his fee at the time he registers. If he wishes to use the instalment plan, he will make a payment of fifty

cents and receive a card. This plan will eliminate altogether campaigns for finances.

The values derived from the plan include (1) easier financing of pupil activities, (2) elimination of all forms of subscription and ticket-selling campaigns, (3) enjoyment of pupil activities by all pupils at low cost, (4) attendance of all pupils at all school events, (5) and a better school morale. It is unfortunate that in the past many pupils have actually been prohibited from attending school events because of lack of funds. With a low fee paid in weekly instalments, no pupil need be excluded for this reason. The attendance of the entire student body resulted in increased interest on the part of participants in the school's activities. An audience was certain; critics were certain; and approval of the performance was desired. Better productions were the result.

## Educational Writings

### REVIEWS AND BOOK NOTES

*Vocational education in the junior college.*—Training for the professions has always been accepted as an aspect of university work. Only recently has vocational training for a variety of occupations come to be considered a legitimate part of secondary education. There are a score or more of semi-professions the training for which suggests an education somewhere between the level of the secondary school and the level of the university. Training for these semi-professions, which include the accountant, the nurse, the detective, the stock-raiser, the draftsman, the surveyor, the builder, the contractor, and the X-ray operator, has been provided almost entirely by private schools. Whether or not specific vocational education is a proper function of public education is not the question. The fact is that public education has included in its activities special training for some vocations and no training for others. A recent book<sup>1</sup> shows why future members of certain of the semi-professions can best be trained in public institutions at the junior-college level.

The author gives evidence of having used thorough methods of procedure in determining (1) the occupations that can be viewed as semi-professional in character, (2) the classification of these occupations from the standpoint of the training required, and (3) the educational institutions best adapted to carrying forward the training programs. A survey of catalogues of schools was made to ascertain the semi-professions for which schools are now specifically training students. This list of semi-professions was submitted to a large number of specialists in vocational education for the purpose of determining the occupations for which training can be given at the junior-college level. Twenty-eight occupations were thus selected. These were analyzed to bring to light the training necessary in each occupation, the number of individuals engaged in each occupation according to the census reports, and the number of students who should be in training to meet present and future demands in each field of work. In an attempt to locate the institution best adapted to the training of individuals for these semi-professions, the author investigated (1) the national system of

<sup>1</sup> G. Vernon Bennett, *Vocational Education of Junior College Grade*. University Research Monographs, Number 6. Baltimore: Warwick & York, Inc., 1928. Pp. 244. \$2.75.

vocational rehabilitation, (2) the nation-and-state land-grant college system, (3) the state university system, (4) the state teachers' college system, (5) the district junior college system, and (6) the Smith-Hughes vocational-education plan. Although it is obvious from the title of the book what the author would recommend, the proposal that junior colleges receiving federal and state aid offer curriculums for the training of persons to enter the upper-level vocations is readily accepted in the light of the evidence presented.

Those interested in the organization and administration of the junior college will find in the book suggestions for enlarging the curriculum. To those interested in the general problems of education the publication either offers evidence that shows there should be an increase in the scope of vocational education or makes it clear that sooner or later there will need to be a consistent policy regarding the use of federal funds for the support of vocational education at all levels.

ROBERT WOELLNER

*A new point of view in secondary education.*—Until within the last few years the dominating purpose of secondary education was to prepare for college. Only those courses were offered which the college would recognize when students applied for admission. The primary emphasis of instruction was on the amount of ground covered and the preparing of pupils to pass college-entrance examinations. Each day the teacher would assign a certain number of pages to be learned for the next day's recitation. Within the last fifteen years the enrolment in secondary schools has increased very rapidly and has included types of pupils who formerly did not attend schools at the secondary level. Several methods of procedure have been worked out to meet the needs of these new types of learners.

The supervisor of high schools in the state of Maryland has written a book<sup>1</sup> urging that teaching methods be formulated according to the learning processes of children and that teaching procedure be adapted to the ways pupils study and learn. He has little place for the teacher whose primary objective is the covering of a certain number of pages in a specified time.

The contents of the book are arranged under five headings: "Lesson-Hearing versus Teaching," "The Assignment of Lessons," "Some Illustrative Teaching Procedures," "The Method of the Recitation," and "Aims and Devices." The author begins by citing actual classroom observations; he notes the various teaching methods used and the results obtained by each method.

The assignment of the lesson should be more than the hasty assignment of a certain number of pages to be learned before the class meets again. Different kinds of work call for different kinds of assignments. Each pupil must have a clear idea of what is to be done and the reason for doing it in a particular way. Otherwise, he will not know how to attack the new work. Several examples are given to illustrate good and poor instruction. Examples are drawn from the

<sup>1</sup> E. Clarke Fontaine, *Ways to Better Teaching in the Secondary School*. Boston: Ginn & Co., 1928. Pp. xii+272. \$1.60.

fields of English literature, foreign languages, science, mathematics, history, and problems of democracy to illustrate good techniques in the newer methods of approach. The author suggests that the method of the recitation be determined by the kind of work involved. In some instances the socialized recitation will be best. At other times pupils should be called on to make reports on their progress in the unit being studied.

In the closing chapter, "Aims and Devices," the author attempts a restatement of the purposes of education and summarizes the benefits to be gained from the plans mentioned earlier in the discussion. He points out vividly the great need for replacing the oral-testing recitation method with plans which have proved sound. Then he hastens to show that there are serious obstacles to be overcome before much headway can be gained. In the first place, a comparatively small percentage of teachers are adequately trained for the newer concept of teaching. In the second place, the members of the community are by training and custom so thoroughly habituated to the oral-testing method that they view with suspicion any departure therefrom.

Teachers and administrators will find the book valuable in that it shows the inadequacy of the daily recitation and gives specific examples of the newer technique.

D. H. LOREE

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*The questionnaire as a method of research in education.*—In recent years opposition to the questionnaire as a method of research in education has been widespread. The general criticism of the method is probably due to its misuse rather than to anything inherent in the method itself. On account of the dearth of factual data in education, the questionnaire has probably been used entirely too frequently and in many instances ill advisedly. As a result, the method has fallen into such a state of ill repute that the individual who uses it invites the wrath of from 50 to 60 per cent of the persons to whom he sends questionnaires.

A monograph<sup>1</sup> which combines the functions of a critique and a manual on the use of the questionnaire in educational research is therefore very timely. The author shows the extent to which school officers are called upon to supply information through questionnaires and the professional status of the persons who use the questionnaire method of investigation. The literature of educational investigations is examined, and data are presented to show the frequency of use of both the questionnaire method and other methods in the different fields of education. From the data inferences are drawn regarding the legitimate fields for questionnaire studies. The questions found in questionnaires are analyzed to ascertain the types of responses required, and the types of responses are

<sup>1</sup> Leonard V. Koos, *The Questionnaire in Education: A Critique and Manual*. New York: Macmillan Co., 1928. Pp. viii+178. \$1.25.

evaluated. Two criteria are proposed by the author for the appraisal of both questionnaires and questions, namely, the ability and the willingness of the persons to be approached to furnish reliable answers. Doubt as to either the ability or the willingness of the persons to supply answers of fact, opinion, or both fact and opinion to the questions prepared should deter the investigator from sending them out. Fourteen recommendations regarding the use of the questionnaire method in educational research are presented by the author, which, if carefully observed, should do much to remove the criticism which is at present directed against the method and in some instances against those who use it.

The book should aid in clearing up the unfortunate situation which has developed regarding the questionnaire. If the study succeeds in inhibiting a considerable number of such investigations, in improving the quality of those which are really justifiable, and in silencing the criticism which threatens to destroy a legitimate method of acquiring certain kinds of necessary information in education impossible to obtain by any other method, the author will have rendered a valuable professional service.

W. C. REAVIS

*Physical education for high-school girls.*—In the past physical education has encountered difficulty in securing recognition comparable with that of other subjects in the high-school curriculum. This situation has been due largely to the lack of understanding of physical education by administrators and school boards, accentuated by the seemingly great expense involved in securing well-trained teachers of physical education and the necessary equipment to carry on the work efficiently.

The authors of a new book<sup>1</sup> have admirably attacked the problem and have made clear a means of stabilizing physical education by making it an important part of the high-school program for girls. It is not their aim to discuss organization or to present an outline of study. They consider the field from the standpoint of its educational value, not merely as a means of unlimited activity for all. Selected activity as a device for educating the individual girl to attain the greatest use of her capacities is made the aim of the work. In order to accomplish such an end, a well-trained leader and adequate equipment are necessary. With these as accepted fundamentals, the authors develop an activity program and its essentials.

The first step is the giving of a complete medical examination. The purpose of this examination is to determine the condition of the individual with respect to normal growth and development, to ascertain correctable defects, and to discover any infections or contagious conditions. This type of inspection must be made by a physician. Adequate charts illustrating the procedure are given in the book.

<sup>1</sup> *Physical Education Activities for High-School Girls.* By the Staff of the Department of Physical Education for Women, University of Michigan. Philadelphia: Lea & Febiger, 1928. Pp. xii+322. \$3.50.



The results of the examination make possible the medical classification of the individual girl and her placement in activity according to her physical fitness. Six classifications are suggested: girls who are fitted for unlimited activity, girls who are slightly below normal and should have slightly modified activity, girls who have such defects as require restricted activity, girls who need corrective work, girls who need rest and no activity, and girls who should not be in school. The activity program is carefully planned. The work is divided into three main groups in order that each girl may be placed in work to suit her physical needs. The book presents a wealth of well-selected, classified, and illustrated material for each group.

An adequate bibliography is given at the end of each chapter. The book not only will be of value to experienced teachers but will serve as a guide to those who are new in the work. In its pages the academic faculty and school administrators will find a new point of view.

ALMA J. WYLIE

*Reading material for first-year French.*—There is a very obvious need for reading material for first-year French, a need which Hélène Harvitt and Julien J. Champenois have attempted to meet in a book<sup>1</sup> which they have edited. This book is a collection of medieval French legends and fables, such as "Aucassin et Nicolette," "La Chanson de Roland," and several stories of Renart, all retold in simple modern French. Each story is followed by grammatical exercises and vocabulary and idiom drills. The vocabulary is very complete, having been prepared, as stated in the Foreword, "to give the pupil all the information necessary to a complete comprehension of the text. . . . Information is also given concerning cities and historical characters mentioned in the stories" (pp. iii-iv). The purpose of the book, as expressed by the editors, is not only to afford practice in reading but to "arouse the curiosity and interest of the pupils and to prove an admirable incentive to the study of medieval times" (p. iii).

It would seem that such a book could play a very successful rôle near the end of the first year of French in college. Surely the subject matter should prove interesting to college students bringing to it, as they would, a background of medieval European history and a more mature appreciation of the particular type of literature. The exercises should also be very valuable, serving, as they do, as a review of grammar.

It does not seem, however, that the book would be satisfactory in a high-school course in first-year French. It has been the writer's experience that high-school pupils are most vitally interested in the actual daily events occurring all around them and are somewhat bored by tales such as those found in this book. They do not have the historical, social, or literary background necessary to enjoy them.

<sup>1</sup> Marcelle Huisman and Georges Huisman, *Contes et légendes du moyen âge français*. Edited by Hélène Harvitt and Julien J. Champenois. New York: Charles E. Merrill Co., 1928. Pp. x+212. \$0.96.

Furthermore, the vocabulary is far too large for high-school pupils. It contains some 2,800 to 3,000 words in only 150 pages of both stories and exercises. Thus, it is clear that new words appear so frequently that a first-year pupil would be unable to read the stories without translation although the purpose of the book, as stated in the Foreword, is to afford practice in reading French.

Finally, the amount of grammar covered is certainly beyond that mastered in any high-school class in first-year French. At the end of the first story are an exercise on the recognition of seven verb tenses, including the past anterior, and a drill on the agreement of past participles with both *avoir* and *être*.

The book is very well bound and contains attractive illustrations suggestive of the medieval manuscripts. It should prove a valuable addition to the reading textbooks for first-year college French.

HELEN H. EDGREN

*The English teacher's opportunity for service.*—It is a pleasure to note that recent books on the teaching of English are books to be read rather than books to be studied. They suggest the professional library of the mature person rather than the collection of textbooks of the college student. They are not less scientific and less pedagogically sound for being well written, and they make their impression no less effectively because their format does not instantly suggest the classroom and the assignment.

*In the Service of Youth*<sup>1</sup> is one of the very readable and stimulating books of this type. The title sufficiently indicates the author's point of view with regard to the task of the English teacher. The organization of the book emphasizes various aspects of this task: "Personal Phases," "Craftsmanship Phases," "Cultural Phases," "Social Phases," and "Technical Phases."

Part I, "Personal Phases," summarizes the best modern ideas of the importance of the personal equation, the need in this country of better adjustment of instructor to task, and the value of individualization.

Part II, "Craftsmanship Phases," is a discussion of the teaching of grammar and composition, the best of the three chapters in this section being that entitled "Blue Pencil Persiflage." This chapter should be read by every teacher who is not already convinced of what an earlier writer has called "the futility of red ink."

Part III, "Cultural Phases," stands out as a particularly stimulating and suggestive discussion of the teaching of literature, and this in spite of certain obvious and irritating faults. Of the three chapters, "Literature à la Carte," "Editing To Kill" (chiefly Shakespeare), and "Editing To Educate," the first especially tempts the reader to constructive thinking about the whole problem of how to organize and present literature most effectively. The author advocates the *à la carte* plan of presenting much literature to large groups of pupils

<sup>1</sup> John B. Opdycke, *In the Service of Youth: Chapters on Certain Phases of the Teaching of English in Junior and Senior High Schools*. New York: Isaac Pitman & Sons. Pp. xii+404. \$3.50.

and allowing them to select or reject at will rather than the *table d'hôte* prescription. The analogy is somewhat overstressed, but the idea is in accord with present-day thinking. The chapter includes a list of selections grouped for presentation to large assemblages of pupils by a teacher-reader. Such a list compiled by a person or persons who have used the groups of selections successfully would be dependable and suggestive. One is forced to consider this particular list suggestive rather than dependable, however, when one finds Kipling's story "The Maltese Cat" listed under "A Little Group of Cat Stories." There is a stenographic report of an admirable *à la carte* lesson on the character of the village pastor as he is portrayed in different literary settings by Goldsmith, Chaucer, Longfellow, and Tennyson.

Part IV, "Social Phases," discusses the need of more attention to speech by all teachers rather than by specialists, the unlimited and unrivaled opportunities of the English teacher for teaching citizenship, and the place of newspapers and magazines and advertising in the classroom. The author's summary of the changing attitude toward the teaching of patriotism up to and since 1914 is well characterized as a "patriotic hop-skip-and-jump."

Part V, "Technical Phases," contains three chapters, two of which are excellent. The first chapter, "The Technique of the Recitation," is valuable for its sane discussion of the art of answering and the art of questioning although it unfortunately seems to imply the old type of daily-recitation procedure rather than the more progressive laboratory method, which involves less frequent use of the question and answer. The second chapter is a rather unconstructive discussion of "Constructive Examinations." The author departs from generalities only to give a single example of the type of examination which he advocates, and that for a highly specialized situation. Of great value to all supervisors and administrators of English departments is the last chapter, "Department Management and Co-operation."

The book is large but presents a clear and attractive page. In style, it tends to the use of striking analogy, startling coinages, such as "vexamination," and epigrammatic statement. It is, nevertheless, a valuable addition to the professional library of English teachers and a book which students will find readable and impressive.

EDITH E. SHEPHERD

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*An investigation of the characteristics of citizenship.*—In all probability few terms vary more widely in conception among different individuals than does the term "citizenship" and what it embraces. In an effort to secure "data as to what is the task of the school in citizenship training," T. J. Mahan has completed a study<sup>1</sup> "to determine some of the duties, difficulties, and traits of citizenship and

<sup>1</sup> Thomas Jefferson Mahan, *An Analysis of the Characteristics of Citizenship*. Teachers College Contributions to Education, No. 315. New York: Teachers College, Columbia University, 1928. Pp. 44.

to determine, in some degree, the extent to which the schools are now providing for the teaching of such duties, difficulties, and traits" (p. 3).

The procedure employed consisted of four steps: (1) the submitting of a questionnaire to 350 senior and junior high school pupils in Greeley and Denver, Colorado, to secure pupil opinions concerning characteristics of citizenship for comparison with the opinions of "representative" adults; (2) interviews with eighty "representative" citizens of Greeley chosen from business men's clubs, women's organizations, the faculty of the Colorado State Teachers College, and persons rated by members of this faculty as "superior" citizens; (3) the submitting of a questionnaire to 580 "representative" citizens of "typical" communities in the United States; and (4) an examination of civics textbooks and an analysis of the five "most commonly used" civics textbooks to determine "the extent to which they treat of the specific duties, difficulties, and qualities named by the representative citizens."

The questionnaires differed somewhat in details, but the following questions submitted to the 580 "representative citizens" referred to in Step 3 are indicative of all.

1. What are the duties of a good citizen, or what do you think a good citizen should do?
2. What difficulties do you face in performing your duties as a citizen?
3. What qualities do you think a good citizen should possess? [P. 4]

The main difference between the questions submitted to the pupils and the questions submitted to the adults was that the former were requests for *opinion* while the latter were requests for statements of *experience*.

The results of the investigation revealed marked differences between the views of the pupils and those of the adults. The five main duties of citizens as listed by the pupils and the number and percentage of pupils listing each are as follows: vote (149, or 42.6 per cent), obey laws (147, or 42.0 per cent), render civic service (90, or 25.1 per cent), uphold the government (62, or 17.7 per cent), promote education (43, or 12.3 per cent). The five main duties of citizens as listed by the representative citizens and the number and percentage of citizens listing each are as follows: render civic service (180, or 64.3 per cent), vote (175, or 62.5 per cent), be well informed (96, or 34.3 per cent), obey laws (93, or 33.2 per cent), respect rights of others (62, or 22.1 per cent). Five of the ten duties most frequently named by the 280 representative citizens who answered the questionnaire or who were interviewed were not mentioned by any of the pupils. Similar differences, varying in degree, appear in the opinions expressed concerning the difficulties of citizenship and the qualities of a good citizen. The analysis of the five textbooks showed that, on the average, only 5.64 per cent of their space is devoted to the duties, difficulties, and qualities of citizens mentioned by the 280 representative citizens.

The following conclusions are typical of those which the author draws from his study. (1) The school should provide definite training for citizenship in terms of the duties, difficulties, and qualities involved. (2) The available text-

books in civics fail to provide the material needed to educate high-school pupils as to the duties, difficulties, and qualities of citizenship. (3) Pupil concepts of the traits of good citizenship do not agree with those of adults. (4) Children leave school expecting to meet duties and obligations different from those reported as important by representative citizens. Although obvious weaknesses in the nature of the investigation will occur to discriminating students of civic education, the study is suggestive and worth examination.

HOWARD C. HILL

*Appraising a course of study in the social studies.*—When an old course of study is supplanted by a new one, there frequently results a feeling that the new one is superior to the old, but no one is quite able to point out the specific respects in which it is superior. There seems to be no scale for measuring results such as these. However, this situation may not continue much longer for there has recently appeared an attempted appraisal<sup>1</sup> of a course of study in terms of its effect on the achievements, activities, and interests of pupils.

The study was carried on in connection with a curriculum-revision program in Oklahoma City, Oklahoma. The experiment was concerned with the relative merits of a new course of study and an old course of study in the social studies and was carried on in the first half of the sixth grade in twenty elementary schools. Four outcomes were investigated: (1) the achievements of pupils as measured by subject-matter tests, (2) the extent to which desirable leisure-reading habits were formed, (3) the type and extent of interests aroused by the subject matter presented, and (4) the extent to which constructional activities related to the social studies were carried on by the pupils outside the classroom. Objective tests were constructed to measure the accomplishments of pupils along these four lines.

As one reads the description of the experiment, one is impressed with the fact that methods of teaching are being compared rather than courses of study. In fact, the author's first general conclusion relates wholly to methods of instruction. It would seem that the author has merely compared the results obtained by the formal textbook method of instruction with those accomplished by the unit-mastery method. What she discovers does not surprise one familiar with current methods of instruction. Why shouldn't one get better results from a good method of instruction than from a poor method? Furthermore, if the formal textbook method has virtues, three of the measures used in this study would never reveal them. Potatoes are not measured with a foot rule. A method of instruction which does not attempt to accomplish certain ends should not be condemned because it does not attain them.

R. M. TRYON

<sup>1</sup> Velda C. Barnesberger, *An Appraisal of a Social Studies Course in Terms of Its Effect upon the Achievement, Activities, and Interests of Pupils*. Teachers College Contributions to Education, No. 328. New York: Teachers College, Columbia University, 1928. Pp. 92.

*Making citizenship studies interesting.*—The necessity for making citizenship studies real and vital to secondary-school pupils is conceded by all who teach in that field. Such teachers will undoubtedly appreciate the contribution made by a new book<sup>1</sup> of readings in citizenship which has as its primary purpose an "appeal to the interest of the secondary-school student" (p. v).

The book is a companion to an earlier textbook, *Everyday Problems of American Democracy* by John T. Greenan and Albert B. Meredith, and follows its organization. It is divided into three parts, "Readings in Politics," "Readings in Sociology," and "Readings in Economics." Approximately one-half of the book is devoted to politics and one-fourth to each of the other two divisions. Each of the thirty chapters is concerned with the same problem as is the corresponding chapter in the textbook. The approach to the problems, also, is that used in the earlier work, namely, the presentation of material which states the case for and against representative points of view. For example, chapter i, "Democratic Government," consists of two readings; the first, taken from an address by President George B. Cutten, of Colgate University, expresses the view that government by the people is impossible; the second is entitled "Senator Borah Defends Our Democracy." Similarly, chapter xxii presents in two readings the views of prominent men concerning the development of superpower by private enterprise and by government monopoly.

Examples of the topics treated in the section "Readings in Politics" are "Americanization," "Political Parties and Elections," "City Government," "Education," "Limitation of Armaments," and "The Philippine Problem." Illustrative of the materials selected for the section "Readings in Sociology" are "Heredity and Environment," "The Divorce Problem," "The Liquor Question," and "Crime and Its Treatment." In the section "Readings in Economics" are such chapters as "The Trust Problem," "Marketing and Prices," "Conservation of Natural Resources," "Taxation," and "The Capitalistic vs. the Socialist Society."

The helps at the end of each chapter are unusually worth while. "Questions on Reference Readings" are supplied to enable the teacher to test the pupils' comprehension of material read. "Additional References," sufficient in number to afford pupils a fair chance to obtain books even in a small library, provide a further means of developing the interest that attaches itself to thorough knowledge. Suggestions for "Laboratory Work in Citizenship" pave the way for actual citizenship activities and for the expression of vital interests.

The value of the book is enhanced by the fact that it includes material on politics, sociology, and economics. It is attractively and substantially bound.

The author has succeeded to an unusual degree in achieving his purpose to make the book interesting. The pro-and-con method of treatment and the newness and freshness of the materials selected make the book an alluring one.

JOHN F. PUTMAN

<sup>1</sup> *Readings in American Citizenship*. Compiled by John T. Greenan. Boston: Houghton Mifflin Co., 1928. Pp. xvi+436. \$1.60.



*The interpretation of the results of intelligence tests.*—The data gathered during the last few years by research workers in the field of intelligence-testing have aided in the development of a conservative attitude toward the significance of the results of intelligence tests. This conservative point of view is reflected in a book<sup>1</sup> which treats of the significance of intelligence tests for school and society.

The purposes that guided the author in the preparation of this book may best be learned from his words:

The procedures developed in the testing of intelligence and the findings which have been made . . . are sufficiently novel and definitive . . . to warrant a canvass of their significance and implications [p. v].

At the same time he [the author] believes that the tests and the suppositions which underlie them are in need . . . of critical examination. . . . The professional, as well as lay, opinion now most generally held is that the tests provide a means of recognizing and appraising the intellectual inheritance of the individual and that the great differences in the intelligence of individuals have been proved, by the use of tests, to be due in the largest measure to inheritance. The writer has sought every opportunity in the following discussions to show the insufficiency of this analysis and to direct attention to the part which learning plays in determining both intelligence and behavior [pp. v-vi].

The makers of intelligence tests are repeating the mistakes of school men in envisioning too narrowly what constitutes intelligence and, indeed, education. Evidence of the contracted vision of both teachers and testers has been discovered and set forth. . . . It is maintained that formal schooling is too largely verbal or linguistic. The consequent hardships of those who have even minor disabilities in this respect are given what is believed to be more adequate and sympathetic recognition than has been used in similar discussions. An analysis is also attempted of the nature of these special intellectual shortcomings [p. vi].

The first three chapters are devoted to a brief discussion of the development of intelligence tests and to a brief consideration of the results of various types of tests. The nine remaining chapters discuss the nature of intelligence; the influence of environment, maturity, and special abilities and disabilities on the results of intelligence tests; the relation of intelligence to achievement and to behavior; provisions for "strong- and weak-minded" pupils; and, finally, a desirable policy on the part of society regarding the use of intelligence tests and the results of intelligence tests.

Unlike Professor Freeman's book, *Mental Tests*, the treatment centers around only one type of mental test, namely, the intelligence test, and emphasizes primarily the interpretation of the results of intelligence tests. The book can best be used, therefore, where a simple and extended discussion of the interpretation and use of the results of intelligence tests is desired. It is an excellent treatise for such a purpose.

R. H. OJEMANN

<sup>1</sup> Walter Fenno Dearborn, *Intelligence Tests: Their Significance for School and Society*. Boston: Houghton Mifflin Co., 1928. Pp. xxiv+336. \$2.50.

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